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ART. I.—MISSISSIPPI RIVER.

THE GREAT IMPORTANCE OF IMPROVING THE MISSISSIPPI RIVER.

The Mississippi River, taken in connection with the Missouri, is the longest known river on the earth, and, with its tributaries, waters the greatest extent of territory. Yet large as is the number of towns and cities at present upon its banks, whose commercial interests are directly connected with its waters, it is not a hundredth part of what it is one day destined to become; and vast as is the amount of produce from the interior which now descends, and of imports that ascends that river, they are really inconsiderable, when compared with the most moderate estimate of the amount that must, at some future day, find a way to their respective markets, along its channel. Being the outlet of an immense valley, and the traveling and commercial thoroughfare of a population, increasing beyond all ordinary calculation, whatever affects the permanency of its channel, or general character as a navigable stream, must excite an interest in the minds of all who reside sufficiently near its waters to have their property affected by its overflows, or a change in its channel. These overflows have been of such a character for the last few years, as to spread consternation among those whose agricultural interests lie exposed to their ravages; while the changes evidently taking place in the lower channel of the river, have begun to excite alarm in those who see their business and real estates likely to be endangered by their continuance. The agricultural and commercial interests, immediately connected with the lower Mississippi, and liable to be affected by its changes, are too vast and important to the general prosperity of the whole country, to permit the necessity for its improvement to be much longer overlooked, or the improvement itself to be much longer deferred. People must be blind, indeed, to their interests, and to the

consequences which already begin to stare them in the face, much longer to stand with folded arms, indifferent to the condition of a river, the yearly damages from which already amount to millions; and the time cannot be far distant, if want of foresight, or reckless indifference to consequences, continue to characterize the action of the legislature of Louisiana, when the river, breaking through its limits, and entirely changing its channel, will so affect present interests in that state as to bring total ruin to many, and leave others no longer possessing any interests capable of being protected by its improvement. Convinced as I am, that, when threatened dangers are overlooked, and all prevention neglected, these consequences become inevitable, I feel anxious that those, whose interests are so deeply involved in the subject, should be fully aroused to a sense of its importance and its danger, and induced to take it up in such a way as to insure the adoption of effective means to save themselves from ruin, and secure the permanent agricultural and commercial prosperity of Louisiana. With this view I now write. I see great danger before the people of that state, which science and experience tell me, if not met by counteracting remedies, is inevitable; and I cannot but feel astounded at the ignorance of some, the blindness of others, and the apathy of all. If I succeed in impressing upon their minds the necessity for action, and that action follows, I shall have accomplished a great good; if I fail, I shall, at least, have performed a duty, the neglect of which I should hold inexcusable.

The causes of the present condition of the river.—The condition of the lower Mississippi, its tendency to overflow, the frequent changes in its channel, and consequent threatened dangers, are the result of many causes, among which the following may be considered the principal:—the sinuosity of the bed, and the want of uniformity in its breadth. Flowing through an alluvial soil, which, no doubt, was originally formed from the materials brought down by the river itself, it is natural that its bed should be subject to continual change, where change is so easily effected, and where so many causes for change are permitted to exist. The slightest irregularity of the banks, or a deepening or shoaling of the bed on one side or the other, will cause the current to change its previous channel, and, in its efforts to continue the obtained motion in the same direction, and with the same velocity, it will abrade whichever bank interferes with that direction. Thus a curve is commenced, which, by degrees, becomes more extended by the continual abrasion of the concave bank, while the opposite convex side increases, at the same time, by deposits of material brought down—its advance keeping pace with the retreat of the other. The curve continues to progress until the river, in its circuitous sweep, returns towards the point where it commenced, leaving only a narrow isthmus at the neck of the bend, between the channel above and the one below, through which the water, during some high flood, at last finds its way, and opens for itself a new and more direct bed. This may be called a natural cut-off, being one of those efforts which the river, under the direction of Nature's laws, makes to regulate a defect in its channel. No person can look over the map of the

Mississippi River, without perceiving that it has frequently exercised this self-regulating power, and, we may say, always to advantage.

Different degrees of density in the soil composing the banks, presenting more or less resistance at different points, will (all other things being equal) have a tendency to produce a similar result; while the same cause existing in the soil of the bed, will cause such irregularity in the breadth and depth of the channel, as to vary materially the velocity of the current in different parts, and thus destroy everything like permanency and uniformity in the channel. The irregularity in the velocity, thus produced by the sinuosity of the bed, and by the want of uniformity in its breadth, also increases its tendency to overflow. For wherever the velocity is diminished, and the free discharge checked, there must be a greater head of water in time of flood, and, consequently, an increased danger of inundation.

Such are the evils consequent upon the present condition of the river: from the point where it enters the lower valley, to its mouth, it may almost be said to consist of a series of curves. The channel being irregular, the velocity is diminished, and its deposits increased; so that, while it apparently retains its usual depth in some parts, in others the bed is evidently rising, and the tendency to overflow, from want of a regular and free discharge of its waters, is increased. There is also a prospect that the present channel may so fill up, as to force the river to open a new passage for itself, and thereby cause the utter ruin of the great commercial interests which have grown up upon its banks.

There are other causes, also, operating upon the Mississippi, which have more or less contributed to its present condition, and continue to exercise an injurious influence upon its channel. Above New-Orleans there are three outlets: the Atchafalaya, Plaquemine, and La Fourche, through which no inconsiderable portion of the water of the main river finds its way in time of flood. These outlets, reaching the gulf by a shorter course, have a greater fall than the main river; and their channels not being so deep, the velocity of their currents is greater at the bottom, consequently they are experiencing a gradual but steadily progressive deepening of their beds and enlargement of their cross sections. On the other hand, the volume of water in the main river being diminished by the discharge through these outlets, loses velocity in proportion, while its deposits are increased. Thus the bed of the main river, below these outlets, must experience a gradual and progressive elevation, and while these outlets are clearing out, deepening and enlarging their channels, the Mississippi is gradually filling up. Indeed, such is the effect produced upon the channel of the main river by means of outlets, that, in the passes, where they are numerous, the depth of the channel decreases regularly from their upper entrance to their mouths. The reason is obvious:—The volume of water which enters the passes from above is diminished, and the breadth of the bed being extended towards the sea, the velocity is likewise diminished; and the current, no longer able to sweep into the gulf the sedimentary matter which it holds in suspension, or which it carries along at the

bottom of the bed, nearly chokes up the mouths of the passes with it. Thus it is that, while there is a depth of over a hundred feet at New-Orleans, there is only twelve at the mouths of the passes; and thus it is, that the free discharge of the water through the mouths of these passes, being impeded, the surface of the river higher up is made to reach a greater elevation in time of a flood than it would if the mouths of the passes were deep enough to admit of a free discharge of water into the gulf. It requires a certain centralized volume of water to keep open the channel of a river, as it acquires a different cross section after the volume of water is diminished; because the river will fashion the size of its bed to the volume of water that remains.

The rapid increase of settlements along the tributaries of the Mississippi, the clearing of the woods, and the cultivation and draining of the lands, by affording a freer and more rapid passage for the waters of the valley into the streams, and carrying along a greater quantity of sedimentary matter, serve to increase still further the tendency to overflow in the main river. For though the quantity of rain that falls throughout the entire valley may not be greater than before, yet much of the impediments in the way of its discharge being removed, and the absorption and evaporation diminished by the increased rapidity of the discharge, the water, after heavy rains, makes its appearance in the main river more speedily, and more simultaneously, and it consequently rises to a greater height. This evil, however it may be provided against by an improved condition of the bed of the river, cannot be prevented. On the contrary, it may be expected to increase in proportion as the settlement and cultivation of the lands throughout the Great West continue to progress.

Incident to the condition of the river may be considered the swamps, lagoons or dead lakes interspersed along the low grounds that lie on both sides of the river, throughout much of its length in the lower valley. These act as reservoirs or feeders to the main river. In time of floods, much of the surplus water flows into them, and, remaining there until the water in the river begins to fall, returns to the main channel. In this way they tend to equalize the volume of water in the river, preventing it from rising as high, in time of flood, as it otherwise would, and also, from falling too rapidly. The effect which they have upon the condition of the river is beneficial, not only because they check, in some degree, the tendency to overflow, and shorten the time of low water; but, also, because they serve as repositories for much of the sedimentary matter brought down by the water which otherwise would remain in the river channel.

The Remedy.—Before proceeding to state the remedy for the present evils and threatened dangers, it may be well to lay down a few simple general principles in Hydrodynamics. The velocity of running water depends upon volume, fall and resistance. When these are uniform, the velocity is always the same; but, in proportion as the volume and fall are lessened, and the resistance increased, so is

the velocity diminished, and *vice versa*. From this arises the fact, that in a straight reach of equal cross sections, where the volume, fall and resistance are uniform, the velocity remains the same; while in a sinuous course of unequal cross sections, where the fall is diminished, the resistance increased, and both constantly varying, though the volume may remain the same, the velocity is not only lessened, but it becomes varied in different parts of the channel. Velocity also varies where uniformity is wanting in the breadth of the bed; being greater where the bed is narrow and deep, than where it is wide and shallow. Water, in a state of motion, is enabled to take up and carry with it the sediment from the bottom of the bed along which it flows; while still water deposits there whatever body heavier than itself may fall into, or be contained in it. The quantity and character of the sediment thus taken up, depends upon the degree of velocity with which the water runs. It requires less to take up alluvial sediment than sand, sand than gravel, and gravel than stones, or boulders. Thus the velocity of the current regulates the depth of its bed. Where it is great, the channel is deep, for the current is able to take up the sediment, or sand, and carry it along; and where it is languid, the channel is shallow, because the current is not only unable to scour out its bed, and keep it deep, but even to carry the sediment brought from those parts of the channel where the velocity is greater, but deposits it along the bed, thus elevating the bottom, and making the river more shallow. From these few simple principles it is plain, that the course of a river should be straight, and its bed of a uniform breadth, or cross sections, whereby a regular velocity may be secured, the discharge of water be performed in the shortest time, and the abrasion of the banks prevented.

In accordance with these principles, the remedy for the evils in the present condition of the Mississippi is as follows:

1st. If a straight course cannot be given to the river, from its too great expense, or other local difficulty, it can be made to approximate as nearly as practicable to such a direction of its channel: that is, to alter the present curves, so that those of small radii may be replaced by others of much larger radii; and the angles of incidence be considerably enlarged. This alteration in the course of the river, by diminishing resistance, and increasing its fall, would have a tendency to lessen abrasion, and by rendering the velocity more uniform, deepen the channel, remove present shoals, prevent their re-formation, and relieve the river in time of flood, by causing a freer discharge of its water.

2d. Establish a uniform cross section between the principal tributaries and outlets, so as to adapt it to the volume both at high and low water mark. This would aid in accomplishing the result sought for above.

3d. Regulate the width, and centralize the current, by giving the channel such a form, that the greatest depth and velocity may be in the middle of the bed, and its least depth and force near its banks and levees. This would prevent abrasion, and secure permanency to the channel.

The old Remedies and their Defects.—In all attempts to remedy the evils arising from the defective condition of the Mississippi, the practice has been to erect new levees, and raise still higher those already in existence, in order to prevent overflows, or assist nature in her efforts to straighten the course by making cut-offs. The state of the river for the last few years shows clearly enough, that, while the elevation of the levees may have a temporary effect in confining the water within the channel, it affords no permanent security, and applies no remedy whatever, to the courses which are evidently rendering overflows more frequent and more destructive. Indeed, the increased height of levees helps to render the overflows more destructive, when the water, rising still higher, finally breaks through. Because, the volume of water brought down by subsequent floods being either increased in quantity, or having a more elevated surface from the partial filling up of the bed, presses upon the levee with greater weight; and when it does break through, pours from a greater height, and makes its ravages more sudden and widely extended.

Neither has any attention been paid to giving a proper direction to the course of the river, or to make the bed between the levees of such a form as would prevent the injurious action of the current on the banks and levees. So no remedy has been adopted for the bad effects of abrupt curves, or acute angles of incidence, which are the most active causes of irregularity in the bed, and abrasion of the banks.

The relative Merits of the different modes of directing the bed.—A most important point in regulating the course of a river that abrades its banks, and frequently changes its bed, is the proper direction of the channel. But the mode of doing this has given rise to a variety of opinions. One is to give long reaches—long as the country will admit—with the angles of meeting rounded off by curves. This plan, however, is defective, and the defect is in proportion to the fall of the water; for the velocity acquired on the straight reach exercises a powerful and injurious effect on the curve where it meets the resistance of the concave bank, particularly where the curve is of small radius, and the angle of incidence acute. It would render defensive works necessary to protect the concave bank, which must cause great expense, but can prove of but little service. Neither should straight reaches be rejected altogether. Where the course cannot be made direct, nor curves avoided, straight reaches may be admitted, if of moderate length, with curves of as large radii as possible, to lessen resistance in the curve and the injurious effect of the current on the concave bank. Yet, even this is rejected altogether by many, because, in some rivers so regulated, they find curves, angles of incidence, and abrasions. They affirm that irregularities are always produced by this plan, by irregular resistance in the river's bed, and by deposits which vary with every flood; and that, to insure it from all change, defensive works are absolutely necessary throughout its entire length, and on both sides, which would involve heavy expenses; while, in curves of small radii, the current never abrades the convex bank, and defensive works cannot be needed under any view, save on the concave side.

But such opinions are unsound, and exhibit, on their part who hold them, a great want of good practical judgment and mature reflection.

Although defensive works be only needed on the concave banks, yet, in a river made up of curves of small radii, there must necessarily be far more of them needed than in one of straight reaches of moderate length, connected by large curves.

In the second place, as resistance must always be greatest on the concave side of a river thus made up of curves of small radii, because the angles of incidence being more acute, the action of the current in the bend is more violent and injurious than in larger curves; so, whatever defensive works be needed, they must be much stronger and more expensive.

Thirdly, the irregularities found in rivers of this kind—namely, of straight moderate reaches with large curves to connect them—arise from the imperfect manner in which this system of improvement has been carried out, rather than in the system itself. For in none of these cases has any attempt been made to give the bed of the river a regular cross section, and thus confine the force of the current to the middle of the channel; the only method by which the banks of the river can be protected from abrasion. It is neither just nor reasonable to urge, or argue against any system, the imperfect manner of carrying it out; the evils of which had been effectually prevented by its proper execution.

The advocates of small curves, with well protected concave banks, seem to believe that bends and angles of incidence cannot be avoided; and are satisfied with attempting to remedy their evils in what they conceive the best manner, and at the least expense. But I am satisfied that they *are* to be avoided by straight moderate reaches, and curves of large radii, when the course of the river cannot be made altogether direct—and that it is more consistent with sound policy to remove the causes of irregularity in the bed and abrasions in the banks, than to patch up any remedy for evils consequent on their existence. And I am equally satisfied such a policy will prove the cheapest in the end.

The Principles upon which the proposed System of Improvement is based.—Where the Mississippi runs in straight lines, or in curves of large radii, and where the greatest depth of water occupies the middle of the channel, forming a basin from which the banks on either side rise with a gradual and uniform elevation, we find no abrasion of the banks; consequently, the principles which serve as the base of the proposed system are neither innovations, nor mere theoretical ideas, but the results of a simple imitation of the mode which nature, when uninterupted, adopts to regulate the motion of water. It is an established fact, that in straight canals, where the cross section is formed of a half circle, the greatest velocity is always in the middle, where there is the greatest depth, and, consequently, the least resistance to motion. It is equally true, that where the banks of a river or a canal rise from the bottom of the bed progressively, with a gradual and uniform elevation, the velocity and action of the current are weakest near the banks, and there exists no apprehension of

abrasion. These facts being indisputable, the problem is reduced to finding the means to give, and preserve, to the bed, a proper direction, and a cross section composed of a regular concave form, deepest in the middle, with lateral sides, or banks, rising from the bottom of the bed with a gradual and uniform elevation.

Reasons in favor of the Application of those Principles.—By the adoption of this system of improving the channel of the lower Mississippi, two important effects will be secured.

1st. The middle of the bed being the deepest, the greatest velocity and action of the current will be confined to that part where it can produce no injury; but, on the contrary, prove most useful in deepening the bed, and keeping it clear.

2d. The banks rising from the bottom of the bed in the form of inclined planes, or gentle curves, presents the least possible resistance, and, the water nearest them having the least depth and velocity, there can be no abrasions of consequence, and little probability of changes in the channel.

The only difficulty in the application of this system of improvement consists in maintaining the regularity of the proposed profile. The displacement of materials, which always takes place during floods, is generally caused by the irregularities of the present channel, and is considerable only where there are sudden changes in the fall, or in the direction of the current. These causes would not exist were the channel regulated as proposed; and the higher parts of the banks or batture in front of the levee being covered with a sheet of water of little depth and velocity, the displacement of materials would only occur in the middle of the bed along which they would be carried, rendering the formation of shoals highly improbable; or, if formed at all, they would be of little consequence. And if the slight irregularities still remaining, caused by abrasions during a flood, they would only acquire a slight depth, which the materials that the current always brings down with it would fill up as soon as the velocity diminished.

Admitting, even in opposition to the advocated opinion, that there would be a considerable transport of materials, they would be almost equally deposited, because the uniform action of a current in a regular channel could not produce irregular effects; so the regime of a river could not be sensibly altered. I am well satisfied that the quantity of matters carried along by the current would be much less in the bed if properly regulated, than in its present state. The displacement of the materials forming the bed, which now takes place at every flood, are only due to the sudden changes in the breadth and direction of the current, which are constantly occurring in the present condition of the river. The abrasion of the steep concave banks in the curves of the small radii, and that of the bottom caused by the irregularity in the velocity of the stream, provide the greater part of the materials now carried along by the current; while the want of uniformity in the direction and breadth of the bed, causes the changes in the extent and height of deposits at the convex sides. In an entirely straight channel, or in one consisting, as before said, of

straight reaches of moderate length connected by curves of large radii, of a uniform cross section, and with gradually inclined banks, and regular fall, those causes would not exist.

The Mississippi, in its lower course, carries along in suspension small particles of earth, and at its bottom fine sand, which results from the abrasion of its banks, or from the tearing up and wearing away of its bed; while the gravel and *debris* from the upper course of the river and its tributaries, which are found on its lower course, were, no doubt, deposited there at the time of the great revolutions of the globe. It follows from this, that as soon as we avoid the abrasion of the banks, and the causes of the accumulation of deposits in the channel, there will be little displacement of the materials which compose the bed and banks, then the accumulation of deposits will be prevented, and the *regime* of the river be regular and uniform: for the form of the proposed bed will effectually prevent the removal of its materials, and the irregularity of the deposit of such sediment and sand as may be brought down from the higher parts of the river, which I am justified in considering the chief evils of its present condition, and the result entirely of those defects which I propose to remedy.

Character of the proposed Improvement.—The special character of the system which I propose for the improvement of the Mississippi River, may be thus stated:

1st. The bottom of the bed will have a concave form, with the greatest depth in the middle, with lateral sides rising progressively towards the top of the banks, so that the current will be completely centralized.

2d. That the action of the current will be strongest in the middle, where it can do no injury; but, on the contrary, be useful in removing all materials which would otherwise be deposited there, and might tend to alter the regularity and uniformity of the cross section.

3d. That the high water cannot reach the levee except over a gentle plane, or slope, covered with grass, which will have a tendency to lessen its action, and thereby prevent abrasion; so that there will be no apprehension of its being broken through, or requiring any important repairs.

4th. That the borders of the bed being thus protected, and secured from the force of the current, and the middle kept deep and clear, the levees will not require to be as high as under the present system, and may be made of common earth, the interior slope being lined with grass, thus combining the least possible resistance to the passage of the water, with economy in construction and facility of repair.

5th. That the channel of the river, approximating as nearly as practicable to a straight course, and the main force of the current being confined to the middle, and nowhere washing against the banks, there will be no possibility of the formation of shoals, and scarcely a probability of the existence of snags, or sawyers, to impede navigation, or render it dangerous. For such trees as may be

brought down from the upper course of the river, or its tributaries, will naturally be carried by the force of the current into the middle of the channel, where the depth and velocity will be greatest, and where they will meet with no impediment to stop or detain them in their onward course to the gulf.

Advantages of the proposed Improvement.—I think that the proposed system for the improvement of the Mississippi River, on account of its special advantages, and its economy, is not only the best, but the only practicable one for permanently regulating the channel and embanking the river; and that when its advantages, and the facility of its execution, are once confirmed in the public mind by experience, it will afford a model for regulating and embanking such other rivers as may require improvement, and be adopted in preference to any other, with such slight modifications as the peculiar character of each may require. I am convinced that this system, fully and properly carried out, will entirely prevent the too frequent disasters caused by inundation, and secure to navigation a mid-channel of uniform, constant and sufficient depth everywhere, and at all seasons.

These advantages appear to me to be sufficiently important, and to have enough claim upon public interest, to authorize my asking for this system of improvement, and the reasons upon which it is based, that attention and examination, and the sanction of that approval, which I think they deserve from the well-informed part of the community, who now begin to feel the necessity and importance of improving the course of a river, whose inundations cause so many ravages, and whose frequent changes threaten to interfere with the navigation of its channel.

Objections to the proposed Improvement.—The only objections that can be made to the mode of directing the course of the river, and of centralizing the current as proposed, is, that it will require land at some places, for a new channel, and at others for extending the breadth of the present bed of the river. But it is certainly better that the planters who reside along its banks, and whose interests are so deeply involved in the future as well as the present condition of the river, should make a voluntary sacrifice of the necessary land, by which a perfect guaranty may be secured for the rest of the delta, than that their plantations should continue to be exposed, as they are at present, to heavy losses every year from inundations caused by the wearing away and breaking through of the levees.

The examination of a system of improvement is often referred to persons who are not thoroughly acquainted with the subject, and who judge of the plan before them according to ancient prejudices and opinions, which are not applicable thereto; and the proposed improvement, being unfamiliar to every day's practice, it is rejected, and society deprived of all advantages which may arise from it, or would contribute to the advancement of its commercial and agricultural prosperity. We admit that government ought to be very cautious about adopting a system of improvement suggested by persons who have no experience, and who are unable to give a detailed account of

the principles upon which they base them. But propositions brought forward by competent persons, who have had long experience in the practice of their profession, ought to be received with less reserve and more confidence. Instances are numerous, in which yearly losses have been permitted to continue, until the aggregate amount has gone a hundred fold beyond the expense that would have been sufficient, in the first instance, to prevent them, and in many cases the remedy has come too late to save. The reluctance of governments to undertake the responsibility of new improvements, has deprived some countries of opportunities of national pre-eminence which time never threw in their way again. Indeed, if a fair estimate could be made, it would be found that the losses consequent upon the refusal to adopt, or the procrastination of new improvements of a public character, have been greater than the actual expense of all that have ever been undertaken, successful or unsuccessful.

The present Defective and Dangerous Condition of the River.—So long as the present condition of the river is permitted to continue, all attempts to remedy the abrasion of its banks, the overflow of its waters, and the damage resulting from them, by mere temporary, or local, improvements—no matter how costly they may be—must prove utterly inefficient. The course of the river must undergo a radical change; and the system of improvement must be of a general, uniform and consistent character, before any real permanent benefit can be derived from the amount of expenditure which the giving way of the levees render yearly necessary. It is, therefore, the duty of the legislature of Louisiana to adopt some such system, as by that means only can they hope to remedy the evils consequent upon the present condition of the river; or relieve the agricultural interests along its banks, from the heavy losses yearly recurring, or save the commercial and real estate interests from the utter ruin that now threatens them. A heavy responsibility must rest upon each future legislature of that state, for every neglect to perform so highly important a duty. That the improvements hitherto attempted have proved insufficient to accomplish the end desired, requires no argument: the results speak for themselves. Till now, if the utterly futile efforts to deepen the southwest pass by dredging machines be excepted, all attempts to improve the river have been limited to a few cut-offs, executed without any regard to system, and not even in the proper direction; and of levees erected along the banks at random, without any regular, uniform, or consistent plan. In fact, the river has been left in its natural state, and entirely to the discretion of the planters along its banks. Consequently, the convex banks have steadily increased, in some cases naturally, in others by artificial means used for that purpose; so that the whole current of the river has been thrown with a yearly increased force against the concave banks, and the tendency to abrasion, change, and overflow, has been yearly increased. This is all that has been done for the river. The result of which has been to increase its already existing defects, while nothing has been attempted in aiding the discharge of the water, so as to reduce its height, or to relieve the levees from its great pressure in time of flood, which is continu-

ally wearing them away and breaking through; such as straightening the course of the river, where it could be done by the making of properly directed cut-offs, or altering abrupt curves into those of large radii, or by centralizing the current. The very means used operate against the intended object. To increase the convex banks and the levees, also, building new and raising the old, serves but to increase the resistance to the motion of the waters, and add to their accumulations in time of flood, thus making the damage more certain and wide-spread, should a crevasse occur. The great error has been, that all attempts have been made with a view, or, at least, with the result of raising the waters by impeding their progress; instead of lowering them, by straightening and regulating the bed in which they run.

Conclusions.—In thus placing my views before the public, my desire is to confer a benefit upon my fellow-citizens of the state of Louisiana, by presenting for their consideration a mode of improving the Mississippi, consisting of a system for regulating and leveeing the channel, which combines that economy and security so indispensably necessary in works of this kind. It needs no argument to prove that the evils arising from the present condition of the river are yearly increasing; and that the time has come when some general and uniform system for the permanent improvement of the channel throughout the whole lower valley ought to be adopted. For the heavy losses and expenses entailed upon the planters by periodical inundations already surpass, in the aggregate, the cost of any system of improvement that may be adopted, however general or extensive it may be. The cost of constructing the levees, even on their present defective system, is a great obstacle in the way of any general improvement of the river, as it must cause expense, which, with the uncertainty of success in the minds of some, may for a time prevent the adoption of my plan. But I feel confident that the people of Louisiana, when they consider how utterly inefficient their present system has proved, notwithstanding its immense consumption of time, labor, and money; and when they compare it with the system I propose, which is simple, comparatively cheap, and entirely in accordance with the laws of nature, they will be compelled to adopt it, even on the principle of economy, as not only the best, but the only means by which the agricultural interests can be secured from heavy and frequent losses, and their commercial and real estate interests from total ruin.

If this system of improvement be adopted by the legislature, I have no hesitation in declaring my entire confidence that the result will fully establish all that can be claimed for it. Overflows will cease; the channel will become uniform and permanent; its navigation will be secure and uninterrupted in low water as well as in time of a flood; and the agricultural, commercial, and real estate interests along the river banks will no longer be exposed to heavy losses, or threatened danger.

The great size of the lower Mississippi, the extent of territory through which it flows, and the vast and important interests which

have grown into existence upon its borders, and now lie exposed to the ravages of inundations, render it utterly impossible that its power can be controlled, and its defects remedied, through the means of individual energy or individual capital. The improvement of the river must be the work of that government whose people are the most deeply interested in its accomplishment; and upon the legislature of that state must devolve the highly important duty of selecting and adopting the mode in which it shall be carried out. They can no longer neglect this duty in justice to themselves, for many of them are sufferers by the present condition of the river, and personally interested in the matter; nor in justice to the whole state, whose every prosperity is involved in it. For the manner in which they may undertake to discharge this duty, they will incur a heavy responsibility; but should they neglect or refuse it altogether, they will prove themselves to be as blind to the experience of the past as deaf to the warnings of the future.

Mobile, November, 1851.

ART. II.—REMARKS ON THE REPORT OF CHARLES ELLET, JR.,

IN REFERENCE TO THE DEEPENING OF THE PASSAGE OVER THE BARS AT THE MOUTHS OF THE MISSISSIPPI.

In a late report, in reference to the deepening of the passage over the bars at the mouths of the Mississippi, over the signature of "Charles Ellet, Jr., Civil Engineer," are to be found many views which I consider erroneous, and utterly inconsistent with the plainest and clearest principles of Hydrodynamics; among these I have selected three propositions, which I intend to make the subject of a few brief remarks:

1st. That the bars at the mouths of the Mississippi are the result of the accumulated deposits—not of the water of the river, but of an under-current from the gulf.

2d. That confining the river in a channel of proper breadth, even if practicable, could not produce the effect of deepening the passage over the bars.

3d. That the true mode of so deepening the mouths of the Mississippi is dredging, or stirring up the material at the bottom.

Now, in order that Mr. Ellet's theory as to the formation of the bars at the mouths of the Mississippi, and my remarks in reference to it, may be well understood, I will first give a few extracts from his report:

"The current of the Mississippi sweeps over the bars at the mouths of the Passes, and at periods of flood, many miles out into the gulf, with a velocity almost undiminished by its contact with the waters of the gulf.

"But it has been suggested that the deposite at the bar is accelerated by the mixture of salt water with the fresh, which hastens the precipitation of the suspended material. This, doubtless, might occur if the assumed mixture should actually take place, to any considerable extent, at the bar. But the supposition is not supported by the fact. The river water does

not mix suddenly with the sea, but rises upon it, floats over it, and rushes far out into the gulf on the top of the denser sea water, by which it is buoyed up.

"I tested this point repeatedly, and found uniformly a column of fresh water nearly seven feet deep in the gulf, entirely outside of land, and salt water at the depth of eight feet below the surface, and extending thence to the bottom. The passage from fresh water to salt water was extremely sudden, both at sea and on the bar.

"In fact, the river does not come down with a certain normal depth and speed, and encounter the gulf at the bar, and there lose its power in the contest. No such process takes place. The fresh water is lighter than the sea water, and floats upon it, as oil or any other lighter material floats on the surface of fresh water, or as the atmosphere rests on the surface of the sea. There is no sudden union or consequent precipitation. There is no sudden destruction of velocity or consequent deposite of suspended silt. The river water, in virtue of its lesser density, rises upon the sea water, glides smoothly over it, passes out to the gulf, and slowly mixes with the sea water as the columns spread over the wider area, diminishing in depth, and is agitated and broken by the wind.

"But the water of the Mississippi does not move over the surface of the gulf at a speed of three feet per second, without imparting a portion of its motion to the sea. The equally impressible and fluid salt water, rubbed by the river which floats upon it, is carried forward by the friction developed at the surface in contact, the fresh water and salt water take the same direction towards the sea, and with nearly the same velocity, but yet keep separate.

"This state of things cannot exist to the bottom, for as the river water is for ever coming forward, if the salt water all flowed towards the gulf, it would all be carried out, and river water would take its place. Fresh water would then be found at the bottom, according to the supposition on which the plan of deepening, by contracting the channel or stopping up the bayous, depends. Salt water must come in from some quarter, to supply the current of sea water that is for ever setting towards the gulf, beneath the water discharged by the river. This salt water can only come from the sea, and can only come in *along the bottom.*

"It is, in fact, the principle of the eddy that is here at work, the movements being exhibited in a vertical, instead of a horizontal, plane.

"Now, the question is, how does this account for the existence of the bar? The fresh water running out cannot produce the deposite, for it has velocity enough to sweep away a foundation of coarse gravel. The outpouring salt water, immediately beneath the fresh, cannot produce a deposite, because it also has a velocity seaward, strong enough to remove anything that is brought down by the Mississippi. The salt water *coming in from the gulf* might produce, and I doubt not does produce, a deposite; for it passes over the soft, muddy bottom of the gulf, and moves into the river, and along the bar, at a very slow rate."

According to these facts and this reasoning, there must be usually on the bars three distinct strata of water:

"1st. Fresh water, running out at top, found by experiment on the southwest bar, to have a velocity of three feet per second.

"2d. Salt water below the fresh, also running out with nearly the same velocity at top; and

"3d. Salt water coming in slowly along the bottom, and apparently a sheet of salt water between that running out and that coming in, which will be without motion.

"But, as already said, and is obvious, all the sea water that comes in must go out again. It comes in along the bottom, and it must go out between the column of salt water coming in and that of the fresh water going out. Each particle of salt water, therefore, must change its direction and position in elevation. It must pass from an inward bound lower strata to an outward bound upper strata. But in passing through this change of motion its velocity up stream must be neutralized. It passes, to use a technical term, the 'dead point.' At this point it may cease to bear its whole burden of mud, *which it has brought from the gulf*, further forward. It leaves it, or a portion of it, at the turning point. This turning point is the place where the bar, for the time being, is in process of formation. But as the upper and lower strata are moving in opposite directions, the intermediate column must, of necessity, have a rotary motion; that motion must be shared by the lower column of salt water, and this turning point must, therefore, be found at the same time at different places along the bar."

From these extracts, it will be seen Mr. Ellet contends that the current of the river, flowing through the mouths of the Passes of the Mississippi, does not meet with sufficient resistance from the waters of the gulf to check its velocity; and, consequently, that it does not deposite the sedimentary matter which it brings from above, and so cannot have caused the accumulations of mud which form the bars; and that the fresh water of the river flowing out into the gulf, over the bars, does not even extend sufficiently in depth to reach the bars, consequently, can neither add to, nor diminish them, as the lower depth is occupied by the stream of salt water flowing in from the gulf, which stream, he says: "Might produce, and I doubt not does produce, the immense accumulation of alluvial sediment, of which the bars are composed."

But these bars are not of such a character as would be formed by any influx from the sea. They are composed, nearly altogether, of soft mud, or alluvial soil; such as must have been brought down by the river, without such a mixture of sea sand, as they certainly would have, were they formed by the direct agency of a current of sea water flowing in from the gulf. Bars formed by the direct agency of the sea, are composed of denser and firmer materials than those which compose the Mississippi bars, and which Mr. Ellet himself informed us, are frequently ploughed through to the depth of three or four feet, by ships passing in and out of the river.

But even admitting the existence of the under-current from the gulf, spoken of by Mr. Ellet, it cannot be of such a character as could possibly have accumulated such a mass of deposite, in the face of the current of the river flowing through the Passes. This under-current is not a stream of great or concentrated volume and velocity, with sufficient scouring power to scoop up from the bottom of the gulf the immense deposites which compose the bars. On the contrary, it is a shallow stream, flowing, in time of flood only, from the open sea against the current of the river, which "passes over the soft, muddy bottom of the gulf—and moves into the river, and along the bar, at a very slow rate," so says Mr. Ellet. He also says: "The current of the Mississippi sweeps over the bars at the

mouths of the Passes, and, at the periods of flood, many miles out into the gulf, with a velocity almost undiminished by its contact with the waters of the gulf." Then how can he arrive at the conclusion that a mere shallow under-current, moving in "at a very slow rate," and against that of the river, could have piled up a mass of soft mud more than a hundred feet above the bottom of the channel higher up; and that, too, in the face of a current, to which the deep water of the gulf scarcely affords resistance enough to diminish its velocity? It is hardly reconcileable with even a slight knowledge of the ordinary principles of hydrodynamics. Mr. Ellet's system of reasoning here involves an absurdity. In endeavoring to establish his theory, he completely overthrows it, by proving too much. If, indeed, the water of the gulf presents scarcely resistance enough to diminish the velocity of the river, flowing through the Passes, as he says, its under-current never could have built up, in the very channels of that current, such dams as these bars; and much less of such soft materials as compose them. Or, if the bars—consisting of such huge piles of deposite, and of such soft materials—were indeed built up, as he contends, by the water of the gulf, in the face of such a current as that of the Mississippi, then the conclusion is irresistible, that the waters of the gulf *must* present a resistance sufficient, not only to check, but almost to stop, its velocity. However difficult it may be for Mr. Ellet to resist either of the above conclusions, both of which, though contradictory, are the legitimate results of his own reasoning, and either of them is sufficient to destroy his theory; he will find it still more difficult to reconcile them, as each is a full and complete offset to the other.

It may be well to observe here, that Mr. Ellet's assumption, that the velocity of the river receives no check from the water of the gulf, is based upon the fact, that the rate at which it passes out over the bars is greater than that of the current in the other parts of the river, where the channel is more than a hundred feet deep. If such a process of reasoning be correct, then it follows, as a matter of course, that where the water of a stream flows over a dam with a rapidity equal to, or greater than, the velocity of any part of the current above, the dam is no obstacle in the way of, and offers no resistance to, the velocity of the stream. It requires no professional skill or experience, to see the absurdity of such a system of reasoning as that; for though it may be true that water runs over a dam with increased rapidity, who is there, that has ever seen a mill stream, that does not know that the water above the dam is checked, and its velocity almost neutralized, by its resistance. The same principle applies to the Mississippi. Though the water of the river may pass over the bar at low water, or when the surface of the gulf is below its natural level, with a velocity greater than that of the current in many parts above, yet all that portion of its volume lying above the bars is checked, and its velocity partially destroyed by the resistance of those bars, and of the obstacles which they place in the way of its free discharge.

Whenever we permit ourselves to overlook the plain principles of

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science, and be led astray by a few isolated facts which, from the want of sufficient examination, appear to conflict with these principles, we invariably involve ourselves in contradictions, which lead to conclusions, not only absurd in themselves, but directly opposed to what has been so long established by experience, and sanctioned by authority, that they no longer admit of question. One of these principles, which nature has established as laws for the government of matter, is, that water is subject to the general law of gravitation, and, therefore, always flows down an inclined surface, or from the interior of the country towards the sea. Another is, that water in this travel invariably forms a channel for itself in proportion to the volume flowing through it; as it never makes a larger one than its bulk requires, nor will it ever be contented with less. If the course of a river be straight, and the channel of a regular normal breadth, the depth will be regular and uniform, and the bottom of the bed be parallel with the surface of the water. If the course of a river be winding, and the channel of irregular width, a want of uniformity will be found to characterize its depth, and shoals and sand bars will be numerous; and all subject to incessant change. If the volume of water be increased, the channel will become enlarged; and if diminished, it will accommodate itself to the reduced quantity of water. Such are the laws which govern the motion of water in a river of moveable bottom, and such are the legitimate effects produced by the operation of all laws.

The bars at the mouths of the main Passes of the Mississippi, have continued to be an impediment to the navigation of that river, ever since the first settlement of the white man upon its banks. Yet, though various plans have been suggested to remedy the evil, the only agent that ever can be made effectively and permanently useful—that is, the water of the river—is constantly, and almost whimsically, overlooked. If the volume of water, which *has* washed out, and still continues to maintain a depth of over one hundred feet at New-Orleans, be permitted to exhaust itself through innumerable bayous, and over the whole of the banks before it reaches the mouths of the Passes, how can it be expected to maintain its depth there? The scouring power, or mechanical effect upon the river's bed depends upon the volume and velocity of the water. If these be reduced, this power will be equally lessened, and the sedimentary matter must accumulate. Where the bed of the river is composed of soft alluvium, there can be no question of the power of a well-regulated current to create and maintain a sufficient channel, provided the quantity and the velocity be not diminished. But where the volume of water is lessened by outlets, its rapidity, and consequent scouring power, fails in like proportion. In the case of the Mississippi, not only is this scouring power diminished as it approaches the mouth,—and which scouring power, wherever the volume is concentrated, and the current not impeded by abrupt bends, never fails to maintain a sufficiently deep channel; but even the power to hold in suspension the immense quantity of sedimentary matter which, in time of high water, it brings from above, is considerably impaired.

This it is, which causes these deposites at the mouths of the Passes, called Bars, where the diminished momentum of the river feels more sensibly the resistance of the water of the gulf. If, instead of being dissipated through so many outlets, and over the low banks, as at present, the full volume of water was kept concentrated, a greater momentum would be maintained towards the mouths, the velocity of the current would not be diminished, nor would its scouring power be lessened; and the bars, composed, as they are, of soft alluvial soil, easily moveable, would be swept before it into the gulf.

The cleansing of the mouth of the Southwest Pass must be dependent upon the force of the outward motion of the water. Because, even admitting that the flood tides from the gulf bring with them such sand as they find outside, and are capable of moving, will not the same flood-tides, when they ebb and are united with the river current, possess and exercise a still greater scouring power, and sweep out a greater quantity of sand and sediment than they were able to bring in? Assuming, then, that the Mississippi is a tidal river, it is well known that the line of the least resistance is seaward, and that the power of the outward motion to return all sand brought by the inward one, must be greater on account of the increased volume and velocity of the water; for the scouring power is estimated according to the combined efforts of volume and velocity.

Hydrometrical observations conclusively show, that in the mouth of a tidal river are only two distinct layers, or strata, of water; the lower stratum, next the bottom, consists of salt, or sea water; and the upper one, of the fresh water of the river, which from its specific gravity floats upon it, continuing perfectly fresh, and flows in its usual course towards the sea. The only change, in time of flood, is in its level, which is raised by the salt water forcing its way underneath. The river water floats on the top during the whole flood-tide, as well as the ebb. In time of the latter, however, the velocity of the water decreases from the surface of the river to the bottom of the bed. But in some tidal rivers the flood acquires such a superior strength over the ebb, that it precipitates itself forward with great velocity, driving before it the waters of the river.

When the surface of the gulf falls below its natural level at the mouth of the river, it occasions a greater declivity in the issuing stream. This must augment its velocity by drawing more water from the stream above, while that part sinks below the natural level, and gives a greater declivity to the waters behind. And thus the stream is accelerated from its surface to the very bottom.

There is one high and one low water in the gulf in twenty-four hours, and the average rise and fall is but one foot; but the Mississippi, at its mouth, shows scarcely any ebb and flow, for the river at all times pursues its downward course in an uninterrupted stream. The volume, or amount of discharge, will remain a constant quantity, and cannot be augmented by works of art, like that of the tidal river; but we can, by properly constructed works, render it more effective in creating and maintaining a greater depth.

But Mr. Ellet asserts that the river water never touches the bars, as the under-current occupies the space between them and the fresh water, which being composed of lighter material, floats above the heavier salt water, and therefore, no increase in the volume of the current, passing out over the bar, could possibly have the effect of washing away the soft materials which compose it. And again, that even if it did, it would only cause the bars to be re-formed farther out. Upon what principle of philosophy a larger volume of water, flowing out over the bars with an increased velocity, would be unable to drive before it over the bar a shallow stream of sea water, flowing in from the gulf slowly and against the river current, he does not inform us; and, indeed, it would be difficult to imagine, when, at the same time, he asserts that the water of the gulf presents so little resistance to the current of the river, that its velocity is scarcely affected by it. As to the last objection, I can only say, what it appears to me, ought to have occurred to any practical man: that the means that would be sufficiently effectual to remove a bar already formed, would certainly be able to prevent its re-formation.

The adhesion of the fresh water to the salt, and the cohesion of the particles of water to each other, must greatly diminish the velocity of the river current on entering the gulf.

Yet Mr. Ellet tells us in one paragraph, "that the river water glides smoothly over the salt water;" and in another, that "the salt water is 'rubbed' by the river, which floats upon it."

Mr. Ellet seems to reason without any fixed scientific principles, and, consequently, weakens the force of his own assertions, by the frequent contradictions which accompany them. Indeed, he seems like a man writing at random, to forget in a second paragraph the position taken in the previous one. Hence his report exhibits a constant confusion of cause and effect, and an entire independence in his conclusions from any legitimate connection with his premises.

The laws which govern the motion of water in rivers, are not the creation of yesterday, nor the discovery of to-day. They have been in operation since the hour this globe was first set in motion, and were well understood more than four thousand years ago by the Egyptians, who availed themselves of their thorough knowledge to control and regulate the periodical floods of the Nile. The heights of this river were mostly marked on the Nilo-meter, at Semneh, in the reign of King Moeris, the great Hydrotect, who lived about 2,200 years before Christ, yet the Mississippi has not a permanent water meter even now. Is it not rather strange to find, in the present day, men professing to be hydrotects, yet utterly ignorant of the simplest principles upon which their profession is based?

Having thus endeavored to show that the cause assigned by Mr. Ellet for the creation of these bars, could not possibly have led to the accumulation of such immense sedimentary deposits; and that the reasons he gives in support of such a hypothesis, instead of being supported by well-connected facts, elicited by systematic and scientific experiments, and a thorough and well-digested course of examination, are based upon a few isolated facts, the result of hasty

observation, alike contradictory in themselves, and irreconcilable with the natural and legitimate operation of the principles by which water in motion is governed; and having also endeavored to show that Mr. Ellet's assumption, that a concentration of the water of the Mississippi cannot deepen the channel at the mouth, because the current of fresh water never reaches the bottom, is utterly opposed to the plain principle of natural philosophy, and the experience of science. I will now notice the remedy which he proposes for the deepening of the channel over the bars, viz., dredging. In speaking of this plan I use the term "dredging," because I consider it here precisely the same in principle, and differing only in the *modus operandi*.

That there are cases where dredging may be useful in removing obstructions from the bed of a river, every professional man of experience will admit. In rivers where the bed is composed of such materials as are too heavy to be moved by the power which the current can bring to bear upon them, dredging would certainly be useful; and, even in rivers where the obstructions are not composed of such heavy materials, the cause which produced them being removed, dredging might be useful in bringing about a more speedy removal of the effects. But in the case of the Mississippi bars, so easily moveable whenever a sufficiently concentrated scouring power is brought to bear upon them, I contend that dredging is not only unnecessary, but that it must prove utterly useless as a remedy.

The experiments to deepen the bed of rivers by dredging or stirring up the bottom, has utterly failed at the following places:

Rivers—Mersey, Liverpool; Liffey, Dublin; Clyde, Glasgow. Frith of Forth, Leith. Rivers—Tyne, Newcastle; Wier, Sunderland; Tees, Stockton; Humber, Kingston-upon-Hull; Thames, London; Itching, Southampton. Bristol Channel, (Wye, Severn, Avon.) Rivers—Elbe; Weser, Bremen; Garonne; Aa, Groningen.

It is a well-established principle in nature, that the same causes, under similar circumstances, will always produce the like effects. While the causes which have produced, and continue to maintain, the bars at the mouths of the Passes of the Mississippi are permitted to remain, the quantity of mud that might be displaced by any kind of dredging machines, will be replaced almost as fast as it is removed. The deposit of sedimentary matter becomes more rapid in the furrows created in the bed of a river by the action of dredging machines, while the soft alluvial soil, such as that which composes the bottom of the Mississippi, will flow in from the sides, and from above, and in an incredible short space of time, restore the level which previously existed.

When a bucket of water is taken from a river, the water on every side rushing to fill the vacancy created, almost instantaneously restores the level of its surface; so the soft alluvial soil at the bottom of this one, when disturbed by temporary causes, will restore its level, just as certainly, though, from not possessing the same fluidity as the water, it will not do it quite so speedily. Indeed, Mr. Ellet himself seems to be conscious of this, when he uses the following language:

"That the channel will be filled up, to some extent, by the material of the bar adjacent to the deepened passage, is not only probable, but certain.

"This stuff cannot stand without support, and will flow in as an imperfect fluid until its surface approximates a level. But the efficient plan here suggested will remove it all as fast as it comes in, and speedily produce a channel of the most ample width. It cannot require over three or four months of high water, with a proper outfit, to open a passage as wide and as deep as can be needed for commercial purposes."

This opinion of Mr. Ellet, it appears to me, while it involves the most singular contradiction, contains an admission that effectually destroys all his reasons in favor of dredging, and proves it to be utterly useless as a remedy. He admits the tendency of the soft sediment composing these bars, to restore the level disturbed by the action of his dredging machines; and that they can remove it no faster than it comes in. If this be as he says, and there can be no doubt that it is, how can Mr. Ellet "speedily produce a channel of the most ample width," and "open a passage as wide and as deep as can be needed for commercial purposes."

From the views expressed by Mr. Ellet in other parts of his report, we are at a loss to conceive what advantage he expects to derive from three or four months of high water; and the idea that he should expect any service utterly inconsistent with them. He informs us, in his report, that the depth of water on the bars is less in time of high water than in low, which is by no means improbable. This diminution in the depth must be the result of an additional elevation in the bar, caused by a more rapid accumulation of deposits at that season. While the water at the bars, scarcely experiencing any elevation of surface from the river,—its volume being exhausted before it reaches the mouth, by the extensive overflows and innumerable outlets above it,—is unable to carry off the increased quantity of sediment which then rolls down along the bottom of the main channel, and, of course, deposits it in increased quantities at the bars. If this be so, what service can Mr. Ellet expect from increased deposits, increased elevation of the bar, and consequent diminution of depth in the water?

These are only a few of the inconsistencies and contradictions which are not explained in the report; they appear to be mysteries in Mr. Ellet's system of hydrodynamics, which the public are left to solve for themselves.

The system of dredging which attempts to remove the effects only, while the cause is still permitted to remain in full activity, is radically bad; and, if adopted for the purpose of improving the navigation of the Mississippi, however profitable it may be to those who have the management of the *job*, will prove an expensive failure to those who will have to foot the bill. No system of improving the navigable capacity of the channel of the Mississippi can ever be of the smallest permanent benefit, which does not begin by removing the cause from which arises its present defects. The accumulation of sedimentary matter is occasioned by the dissipation of the water

through so many outlets, and over the banks, the natural consequences of which have been a decreased velocity in that portion of water still left in the main channel. Let that defect be removed; let that dissipation be prevented; or, in other words, let the full volume of water be guided by a judicious lateral contraction, so that a greater useful body of affluent water will be brought to act upon the bottom of the Passes, and the current of the river itself will be found to contain a power that will—and let me add, it is the only power that ever *can*—improve the navigable capacity of the Mississippi, and permanently maintain that improvement.

The dredging, or stirring up of the mud of the bottom, cannot have the effect of giving a greater velocity to the river, or assisting the waters to discharge themselves in a shorter time. This can only be done by guiding the current and confining the waters in a channel of a proper breadth.

In conclusion, I cannot but express my surprise, that a report, so full of contradictions and inconsistencies, so directly opposed to every principle of science, and to all the teachings of professional experience, should have found a place among the published documents of one of our government departments at Washington; and that it should be so far sanctioned by the Colonel of the Topographical Corps, as to carry with it his recommendation of the author to the superintendence of the execution of the plan suggested by him, in case it should be approved.

Mobile, October, 1851.

ART. III.—STATISTICAL COLLECTIONS OF LOUISIANA.

THE PARISH OF BATON ROUGE.

(Concluded.)

Life Statistics.—I am not aware of any remarkable cases of fecundity in the parish, but from the number of small children you meet with in every part of the town, one would be led to suppose they were the principal article of production. A year or two since, I was visiting at the house of a physician in a neighboring parish. One day while there, the Dr. returned from a visit to a patient, who was delivered of her seventeenth child. The woman appeared unusually delighted at the result: the cause being that she had caught up with her sister, who also had seventeen children. What is remarkable about this case was, that the thirty-four children were all by the same father. They lived in separate houses in the most harmonious manner near each other. This was in 1849; the number may have since increased.

There are several instances of longevity. Madame Acosta, born at Truxillo, emigrated to Louisiana in the year 1765, at the age of nine years, and is now ninety-five. She enjoys excellent health, has a mind almost unimpaired, attends church, to which she walks a dis-

tance of at least half a mile from the residence of her great grandchild, Mrs. Dufrocq, the wife of the Mayor of Baton Rouge. Madame Arrayas was among the emigrants from the Canary Islands, who settled in Galveztown in 1774. Her age is not exactly known, but is supposed to be upwards of ninety; she has but a confused recollection of early events.

The parish is generally considered healthy. The most common diseases are intermittent fevers. The yellow fever has made its appearance in the town at various periods. The greatest mortality from this disease occurred in 1822. During that season there were a large number of soldiers and strangers unacclimated, added to which the lower portion of the town was inundated, and both citizens and soldiers had greatly exposed themselves in working at the crevasses on both sides of the river. Of late years, diseases, attended with diarrhœa, have been more common, but this has been the case throughout the state.

The number of deaths from June, 1849, to June, 1850, out of a population of 11,979, was 340. Of these, among the white population, 14 were from cholera, 23 from other diseases. Total, white 37. The mortality of the slave population was from cholera, 143, other diseases 170. Total 313. The total mortality of whites, exclusive of cholera, 0.62 per cent., a little over one death per annum out of every 300 inhabitants. During the time of my residence here, I have particularly noticed the deaths occurring in the town, and have found that at least two-thirds were transient persons, who came to the place with previous symptoms upon them of the disease from which they died. Quite a number of them were persons of dissolute and intemperate habits. Sanatory regulations would greatly benefit the place. Public baths should be established. The town council have now under consideration, the establishment of a registry of births, deaths and marriages.

The population of Baton Rouge in 1785 was					270
"	Manchac	"	"		77
"	Galveztown	"	"		242
"	Baton Rouge	1788	"		682
"	Manchac	"	"		284
"	Galveztown	"	"		256
"	of the Parish of Baton Rouge in		1820	was	10,847
"	"	"	1830	"	6,698
"	"	"	1840	"	8,138
"	"	"	1850	"	11,979
Of which number there were of whites					5,628
"	"	slaves			6,051
"	"	free colored			248

The American is the predominant population of the parish. The Germans, French, Irish, Spanish, Italian, English and Scotch follow next in order.

The population of the town of Baton Rouge is about 4,000. In 1847 it was 2,523; in 1840, 2,269. Its most rapid increase has been within the last four or five years. When it was taken by the patriot forces under General Thomas in 1810, it did not contain over two or

three hundred inhabitants. Meteorological tables have been kept at the garrison for the last thirty years, but they have been unfortunately lost. The quantity of rain that fell during six months in 1846 was as follows:

	In.	Hun.		In.	Hun.		In.	Hun.
Mar., 1846	12	·03	Jan., 1850	14	·59	Jan., 1851	0	·97
April, "	17	·02	Feb., "	7	·45	Feb., "	5	·27
May, "	13	·02	Mar., "	5	13	Mar., "	1	·54
June, "	16	·00	April, "	9	·35	April, "	2	·26
July, "	14	·90	May, "	4	·19	May, "	1	·42
Aug., "	15	·90	June, "	9	·01	June, "		·97
Total	88	85	Total	47	72	Total	12	43

By the foregoing you will observe, that the present season, 1851, is the dryest on record. Some years ago, in the north-eastern part of the parish, I crossed the path of a hurricane; but do not know in what year it occurred. We have had some severe gales that blew down houses and uprooted trees the present season. Colonel Claiborne, in his notes on Louisiana, mentions the singular phenomenon of snow occurring in this latitude, in the early part of September, when Galvez was on his march to capture the fort at Baton Rouge, in 1779. During the past winter of 1851, we had the deepest fall of snow within the memory of the oldest inhabitants. Sleighs were passing through the streets, and the snow continued on the ground for several days.

Education and Religion.—The first house for public worship was a Quaker chapel, built by Richard Carpenter, on the plantation now owned by Colonel P. Hickey.

In 1787, four Irish priests, who had been educated at the University of Salamanca, arrived in New-Orleans, and were sent to West Florida. One of them was stationed at this place. Father Brady was the parish curate for many years previous to the possession of the Americans. In 1810, there was an old frame building used by the Catholic congregation. The first effort to establish a Protestant church, was made in 1822, by the Rev. Mr. Savage, who came here a Presbyterian Missionary. There had been Methodist circuit-riders before. There are now eight churches in the parish, two Catholic, two Presbyterian, two Methodist, one Episcopal, one common to all denominations. There is also a large congregation of the church called the "Christians," who have no established place of worship.

Four of these churches are situated in the town of Baton Rouge. The Catholic church will accommodate four hundred persons, and possesses property to the value of $12,000; the Methodist church, four hundred and fifty persons, value of property, $7,000; Presbyterian, two hundred and seventy persons, value of property, $3,300. The Episcopal church will seat two hundred and fifty persons, value of property, $2,500. The ministers of the Catholic, Presbyterian, and Episcopalian churches have stated salaries, the proceeds of pew rents. In the Methodist church, the pews are free, and the ministry are dependent upon the liberality of the members of the congregation. The presiding elder of the district resides here, and receives from Conference a salary of six hundred dollars per annum.

The Baton Rouge College was established about the year 1823, and was once in a flourishing condition. It received for many years an annual appropriation from the state. When that was withdrawn, it shared the fate of all the state colleges, and was totally abandoned. The buildings are now used by the Misses Fords, who have an excellent private female seminary in operation. There is now in the town an institution called a college, under the control of the Jesuits, to which are admitted boys of all ages. The Sisters of the "Sacred Heart" have also a flourishing school for young ladies. The number of public schools in the parish is twelve, with the same number of teachers: the number of children who attend them, five hundred.

The expense of education in private schools, of which there are three in the town, is from $2 to $4 per month, depending upon the branches taught. There are four cemeteries. The old one, on the land belonging to the United States, is no longer used. I have seen no tomb-stones later back than 1812 and 1816. The Protestant cemetery is on lands of the United States, back of the ordnance department. A great number lie buried there. The greater part having no mark upon their graves, to tell who, or whence they were, or when they returned to their last resting-place. Such is the case with the late Colonel Smyth, who died of cholera about a year and a half ago. He was a man somewhat distinguished in political life; but "the place that once knew him, now knows him no more." The Protestant Cemetery is a beautiful location, and with a little expense, might be made equal to any of the celebrated cemeteries at the north, in appearance. In January, 1850, a fair was held in the State House for the purpose of fencing the ground. I have not been able to learn why the work has been delayed.

The Indian Mound, used as a cemetery for deceased officers and their families, is a lovely and attractive spot, of which I have before spoken. There have been some thirty or forty persons buried there.

About three-quarters of a mile from the Mississippi is situated the new Catholic Cemetery, with spacious grounds; but little attention has as yet been paid to ornamenting the place. It admits of great improvement, and might be made an "interesting promenade."

Beneath the floor of the Catholic Church are the vaults of A. Grass and his wife, who donated the ground on which the church stands, with the request that his remains might be there deposited. The records of this church were destroyed by fire about twenty-five years ago.

Manufactures.—There is a cotton and woollen factory in the penitentiary at this place; the machinery of which is impelled by a steam engine of 110 horse-power. The labor is performed by convicts, 210 of whom are employed in this department. The average number of yards of heavy cotton goods, linseys, &c., manufactured per week, is 18,000. There are 4,500 spindles, and 60 looms in operation. The cotton and woollen machinery is valued at $60,000. $40,000 capital is invested in machinery for making bagging and rope, at which there are 38 convicts employed. The amount manu-

factured per week is 2,660 yards of bagging, and 3,000 pounds of rope. This is worked by horse and hand power. There is also a foundry, machine shop, and a shoemaker's shop for the manufacture of coarse shoes; and there are three extensive steam saw mills in the town of Baton Rouge, which turn out about 15,000 feet of lumber per day in total. A large brick yard, worked by steam machinery, which manufactures from 15,000 to 20,000 per day.

The whole number of convicts now in the penitentiary is 304. There are but 240 cells; and this house of industry is at present rather crowded. It is a fact worthy of note, that when an epidemic of any character—of yellow fever or cholera—has prevailed in the town, its effects have never been felt within the walls of the penitentiary. So—to what can this be attributed? Probably to cleanliness, and the regular mode of living.

The penitentiary was erected here in 1834, and since that period about 1,500 convicts have been admitted. Formerly this institution was under the control of directors, and a warden appointed by the governor of the state. For the last four or five years it has been leased to Messrs. McHatton & Ward, who pay to the state an annual sum of $4,000. The clerk is elected by a board of directors, and the latter are appointed by the governor.

The most desirable portion of the town is occupied by the United States garrison and Ordnance Department. The United States own $213\frac{50}{100}$ acres as a reservation.

There are seven brick buildings and two frame in the garrison. In the arsenal there are fifteen buildings of brick, and two of frame. There are two hundred and six pieces of artillery; 31,543 stand of small arms; 101,562 shot and shells, fixed and unfixed; 5,283,505 cartridges for small arms, and 71,385 pounds of powder on hand at the arsenal.

The total value of lands, buildings, and munitions of war, at the Baton Rouge Arsenal, is $\$1,152,854\frac{2}{100}$. Lt. Col. Webster, of the 4th artillery, is in command of the garrison; having under him Lt. Daniel Nickel, and one company of the same regiment. Captain Whitely is in command of the arsenal. The garrison is intended to accommodate from 1,000 to 1,500 troops. The present buildings were commenced in 1819, and finished in 1823. Dr. B. F. Harney has been resident surgeon for about thirty years. Persons visiting this place should not fail to see the garrison and arsenal.

The buildings are neat and elegant, and everything about the premises is kept in appropriate style. The naval depot, or yard, at Memphis, should by all means have been at this place. There is a deep bayou on the upper portion of the U. S. grounds, that would be far preferable to the miserable location at Memphis; and all the necessary materials would have been equally as near.

Banks, &c.—By the act incorporating the Bank of Louisiana, passed in 1824, a branch was established at Baton Rouge, for the parishes of East and West Baton Rouge, Washington, St. Helena, and St. Tammany, with a capital of 200,000 dollars. This branch

has long since ceased its operations. Branches of the Atchafalaya, State and City Banks, have experienced the same fate. A branch of the State Bank of Louisiana was established here in 1850, in which the State Treasurer was authorized to keep his deposits. Its capital is $100,000. J. B. Kleinpeter is the president, and Wm. S. Pike, cashier.

A charter was granted for a rail-road, from Baton Rouge to Clinton, in 1832. A survey of the road was made, the track cleared the whole distance, and about two-thirds of it graded; the rails were never laid, and it is now used as a public road. It is now in contemplation to build this road, and continue it to Liberty, in the state of Mississippi. It could be done at a comparatively trifling cost. There is internal navigation on the Amite, to a distance of about twenty miles, for small vessels and steam-boats. The Manchac is also navigable for some distance. There are no learned or scientific societies in the parish, if we except the Agricultural Association, which has ceased operation for some time past. There are funds belonging to it yet in the hands of the treasurer, and it ought to be revived. There are two branches or agencies for insurance offices in the place. The number of paupers in the parish, according to the returns of the census of 1850, was 20: 19 were natives, and 1 foreigner. They were supported by the parish. It is in contemplation to build an alms-house for their reception.

Baton Rouge has, probably, a larger number of charitable associations than any other town in the state, according to its size and population. The masons have a large hall, and number about sixty members. The Odd Fellows and Sons of Temperance meet in the Odd Fellows' Hall weekly; the former on Thursday, and the latter on Monday night—they each number from sixty to seventy members. There is also a German benevolent association, numbering about sixty members.

There are three divisions of the Sons of Temperance in the parish, Capitol Division, Plain's Division, and Salem Division, numbering in all not far from 250 members. There is also a female orphan asylum, under the control of the ladies of the place. About fifteen orphan children are under the care of a kind matron, Mrs. Burgess. An appropriation was made by the legislature to this excellent institution at the last session. The ladies purchased a place, and intend soon to erect a suitable building for their accommodation.

Literary Productions, &c.—The only works of a literary character emanating from this neighborhood, are those of J. B. Thorp:—"Campaigns of the Mexican War;" "Tom Owen, the Bee Hunter;" and a number of fugitive pieces, for the magazines and newspapers, which have obtained some celebrity in the literary world.

Manuscripts are numerous. I have before alluded to them—twenty volumes in French, Spanish, and English, in the Recorder's Office; those in the possession of Messrs. Hickey, Skipwith, and Grandpre; rare old books in the State Library, pertaining to the history of Louisiana. An old English map, made for Governor Chester, under the English regime, in 1774, containing all the grants

of land made under the British government, with the names of the grantees, alphabetically arranged, now in the possession of the Messrs. Wallers, civil engineers. These would form an interesting collection for an historical society, and should be obtained, before they are forever lost in oblivion.

The foregoing answers to your series of questions are necessarily imperfect. As regards the population of the parish at different periods, there appears a discrepancy, which I am unable to account for. This is especially the case with the census of 1820, which exhibits a larger population than at any subsequent period up to the census of 1850. In that year there was a large floating population, and an unusual number of U. S. troops stationed here. Several hundred Spanish loyalists, driven out of Mexico by the patriots, had taken refuge at this place. Another cause is the careless manner in which the census is generally taken in this state.

The municipal election of 1822 exhibits a large population in the town, the highest candidate having received 243 votes, at a time when suffrage was limited to tax-payers and property-holders, which is but one hundred votes less than at the late election, under the system of universal suffrage.

In 1822 Baton Rouge contained:

259 White Families.	1 Academy and 2 Schools.
14 Black "	1 Tanner and Currier's yard.
178 Private Houses.	2 Cabinet Makers' Shops.
10 New Buildings.	2 Saddler's "
1 Theatre.	45 Stores and Groceries.
1 Bank.	7 Tailors' Shops.
1 Catholic Church.	3 Shoemakers' Shops.
1 Jail.	2 Barbers' "
1 Court House.	2 Bakers' "
1 Post-Office.	1 Tinner's "
2 Printing offices.	2 Watchmakers and Silversmiths.
2 Lodges of Free Masons.	1 Shoe and Hat Store.
5 Hotels.	2 Blacksmith Shops.

The election of 1822, in New-Orleans, was warmly contested between what was denominated the French and American parties. The former were triumphant, and elected Moreau Lislet Senator, and Messrs. John R. Grymes, P. E. Fancher, F. Grima, E. Mazureau, A. Devazac, and C. Maurian. The Louisiana Advertiser, in commenting upon the election, in one of its numbers, directly after the result was known, speaks in this wise: "The result of the election in this city has excited much interest. The excitement promises to be neither limited nor short-lived; and judging from present appearances, we look forward to divisions and dissensions in society of the most painful character."

One of the divisions, of an exciting and painful character, as predicted, was brought about by a resolution introduced by Moreau Lislet, to deprive the Florida members of their seats in the Senate. The preamble and resolution is as follows: "Whereas it is provided by the 10th article, 2d section of our constitution, that the state shall be divided into fourteen sectional districts, which shall forever remain

indivisible, and each of them elect one senator: and whereas that number of the said senatorial districts could not be diminished or enervated, except by amending our said constitution, which could be done by a convention only:

Resolved, That so much of the first section of the Act, entitled "An Act for apportioning the representation of that part of Florida annexed to the State of Louisiana, and for other purposes," as goes to establish three new senatorial districts, and to give to that part of Florida the right of electing, and sending to our general assembly three senators, is, in the opinion of the senators, a direct violation of our said constitution; and that the three persons holding at present their seats in the Senate, as senators by virtue of the said Act, have been unconstitutionally elected, and can no longer retain their seats."

As may be supposed, a violent debate arose upon this resolution, which came near producing serious consequences. General Thomas, the senator from Baton Rouge, protested against its immediate consideration, but the Senate persisted; and the ayes and nays being called for, Messrs. Beauvais, Bouligny, Declouet, Ducros, Flanjac, Moreau Lislet and Perret, voted in the affirmative; and Messrs. Thibodeaux, Bossier, Cabine, Hebert, J. A. Smith, J. D. Smith, and Thomas, voted in the negative. So the Senate was equally divided, and the resolution failed. But it was contended by gentlemen in the affirmative, that Mr. Thibodeaux, the president of the Senate, who had voted in the negative, was not entitled to a vote except on a tie; a motion for reconsideration was then made and carried. On the 23d of January, 1823, Major Clark, of St. Tammany, moved that the resolution of Lislet be expunged from the journals, which, after a heated debate, finally prevailed. "In the progress of this debate, General Thomas did ample justice to his cause, his constituents, and himself."

Larry Moore, a representative from Livingston parish, of whom many amusing anecdotes are related, took a deep interest in the debate. He was a rough, plain-spoken and unlettered man, but open-hearted, brave, and generous. In the course of the debate, Ruffignac, formerly mayor of the city of New-Orleans, made a violent speech in French, characterized by all the grimaces, contortions, and genuflexions of French oratory. After he had concluded, Larry arose; and although he had not comprehended a single word of what had been uttered, addressed the speaker nearly as follows:—(I will premise by stating that Ruffignac had a large red proboscis, over which were interspersed blue veins of uncommon size.) "Mr. Speaker," said Larry, "I plainly see this affair has got to come to a gineral fight; and when it does come to that, I shall pick out the fellow that's jist set down there, with the *calico nose*, (pointing at Ruffignac,) for my man, and I intend to give him particular h—l." Then addressing the clerk, the late Judge Cannonge, "And Mr. Clerk, I want you to tell him that, in his own d—d lingo!" The clerk, who was a very polite gentleman, of mild manners and conciliatory disposition, observed in his interpretation, that "the gentleman from Florida said he exceedingly regretted to see so much hostile feeling evinced among members of the same great political family, and much

feared that serious results might ensue, which would be highly detrimental to the interests and welfare of the state, and hoped that a better feeling might be entertained among the members."*

ART. IV.—VIRGINIA COMMERCIAL CONVENTION.

RESOURCES, INDUSTRY AND IMPROVEMENTS OF VIRGINIA—HER CONTEST FOR THE TRADE OF THE WEST, AND PROPOSED FOREIGN TRADE.†

THE committee appointed to report to the convention the most efficient means of achieving its important objects, have performed that duty, so far as the materials existed for a proper statistical exposition of the value of the trade of Virginia, as well as the facilities completed, or in progress, for its transportation to the exporting cities of the state.

The commercial prosperity of Virginia is based upon the employment of the Chesapeake ports; and no project for acquiring the materials or the means of exportation, can be successful, which does not contemplate their employment.

The country tributary to the Chesapeake, possesses advantages not surpassed by any other on the Atlantic. Nature has been so bounteous, that the difficulty has been, not so much to discover a good site for a city, but to discriminate between the numerous excellent locations presented. Norfolk, Richmond, Petersburg, Fredericksburg, and Alexandria, have all been established to receive and conduct the trade of Virginia.

From the individuality of these local interests, it has been heretofore impossible to adopt any system of improvement calculated to promote the exclusive advantage of any one of the cities referred to. Apprehensive that the limited trade legitimate to each might be diverted to some rival, impediments have been thrown in the way of

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* The question was finally amicably settled, and some poet, whose name is lost to posterity, celebrated the same in a poem of forty-six verses, under the title of "The Florida Question." We give a few of these verses as a specimen:—

Grave Lislet then, with spectacles,
Most like a lawyer sage,
March'd foremost of his company,
The wordy war to wage.

"Show me," said he, "whose men you be,
That stand so boldly there:
You fellows—you, from Florida,
By God, you've no right here."

The man that first did answer make,
The noble Clark, was he,
Who said, "We list not to declare,
Nor show whose men we be."

† This address was prepared and presented by Wm. M. Burwell, of Bedford. It is an able, instructive and luminous paper, deserving of wide and general study.—EDITOR.

great lines of communication with the interior of our own and other states, calculated, perhaps, to vary the local direction of some particular trade, but destined, in the end, to compensate each of these cities, by its dividend of a trade far surpassing in magnitude and value, any particular loss. The evils of rivalry will, however, be no longer felt, each of these cities having received a line of internal communication, many of which are now converging to a common point of union; interests heretofore supposed antagonistic, are now harmonized in the completion of a plan common to them all, and weapons brightened by the conflict of a generous rivalry, are now wielded in the achievement of a common triumph. It is thus that the construction of the South Side Rail-road, and of the James River Canal, make the prosecution of the Virginia and Tennessee Rail-road alike important to Lynchburg—to whose public spirit is so largely due the conception and execution of that great project—to Richmond, and to Petersburg. The extension of the great central rail-road to the Ohio, no longer a subject of exclusive interest to Richmond, appeals to the support of Alexandria. The completion of the Dock connections will connect Norfolk with the James River and Kanawha Canal, and interest that city in its extension to the Ohio. The Richmond and Danville Rail-road is upon the same principle, a work from which Petersburgh and Richmond may derive common benefits.

Convinced, therefore, that their interest and duty alike demand a cordial alliance, the cities of Virginia will hereafter bestow upon the extension of the great lines of improvement here indicated, their earnest and combined co-operation.

Since, however, the partial completion of these great improvements have already bestowed upon the cities of Virginia a large accumulation of trade, it becomes necessary to encourage the establishment of a commercial marine, of sail-ships and steamers, to convey abroad our own trade, and exchange for it the productions of other nations. The export and import trade of Virginia is now taxed with transport coast-wise, for exportation from northern cities; it is burthened with the charges of northern merchants; whilst the whole commercial profits resulting from freights, exchanges, as well as from the importation and supply of the goods received on exchange, result exclusively to northern capital and to northern enterprise.

We state this fact in no spirit of sectional prejudice, but as a consequence of our own supineness. We think it time that a trade so circuitous, and a tribute so unworthy, should cease. We should now export from, and import into, the Chesapeake cities of Virginia, by vessels owned and manned by Southern men. No state can expect to preserve its prosperity, which does not provide for its citizens the varied pursuits in which industry and enterprise shall receive an adequate reward.

In estimating the present value of the Chesapeake trade, so far as material are at hand for a correct estimate, we will find that the James River and Kanawha Canal, its principal tributary, contributed during the last year $6,123,865 49, the products of the interior;

whilst it carried into the interior, merchandise and other articles, valued at $7,727,224 29.*

The business of the central rail-road has doubled within the past year; its downward tonnage amounting to 25,000 tons, and its upward transportation is perhaps one-half that amount. The Richmond and Danville, the Richmond and Petersburg, and Richmond and Fredericksburg rail-roads, contribute considerable additions to the aggregate of trade upon the James River.

Amongst other important items of an export trade, we may mention that the total inspections of Virginia tobacco amount to 50,000 hogsheads, of which the larger portion is shipped to Europe; whilst the remainder, with a large amount not inspected, is manufactured in the interior for consumption at home and abroad.

The flouring mills in Richmond manufactured last year 1,173,100 bushels of wheat, and are expected this year to manufacture 1,587,100 bushels. This flour is shipped to Rio, through northern houses, in vessels whose return cargoes consist chiefly of coffee. This coffee is, in turn, sent back in northern vessels to Virginia, for consumption —the freights, commissions, and commercial profits of both the export and import trade, being a direct loss to the state of Virginia, to which this trade rightfully belonged.

During the present year, however, some of the most enterprising merchants of Richmond have shipped nine cargoes of flour, directly to Rio, the vessels to return to this port with hides, coffee, and other products of South America. We are moreover informed that a larger amount of goods will be imported this year to Richmond than has been imported in any one year for a series of years; and that the direct import would have been far larger but for the want of ships in this trade, which compelled our merchants to ship through northern ports.

During the year ending July 1st, 1851, the foreign trade of James River gave employment to a number of foreign and American vessels. From a statement furnished from the Custom House, in Richmond, it will be seen that the tonnage employed in the direct foreign trade between Europe and the waters of the James River amounts to nearly 30,000 tons. This amount is itself amply sufficient to give employment to two steamers of 1,500 tons burthen.

If it were in our power to present the commercial statistics of the cities of Norfolk, derived from the Roanoke River, the Dismal Swamp Canal, and other sources; the rapidly increasing trade of Alexandria, derived from the Chesapeake and Ohio Canal, and from the country adjacent to her; of Petersburg and Fredericksburg; we do not doubt but that an amount of Chesapeake trade could be demonstrated adequate to sustain at once, by the energetic and united patronage of our merchants, a direct trade with Europe and South America. The materials for this trade already exists. Any doubt, however, which may be entertained of the present amount of Virginia commerce becomes unimportant, in view of the immense accessions to follow the

* An. Rep. of J. R. and K. Co., Nov., 1850.

completion of the improvements referred to. Whilst we pause to make the figures, the fact is upon us. A succinct statement of the works of artificial improvement, now in progress and actually completed, will serve to embody the facilities upon which we may rely, and to develope the capacity of transportation upon which the future trade of Virginia must principally depend. We think, therefore, it sufficiently appears that, looking alone at the present trade of our cities, we have ample encouragement to commence at once upon this undertaking, with the fair prospects of trade enough to ensure handsome profits to capitalists who may embark therein.

But when we glance upon the future trade which these cities must enjoy, we are still more encouraged. We will first inquire in regard to the number of miles of rail-roads and canals now constructed. Your committee have been furnished with the following very valuable statistics by the second auditor:—

Statement of the Rail-roads in Virginia completed and in progress.

	Length.	Completed.
Baltimore and Ohio Rail-road	251	90
Richmond and Danville Rail-road	147	35
Richmond and Petersburg Rail-road	22	22
Clover Hill Rail-road	15	15
South side do	122	10
Manassa Gag do	60	
Petersburg and Roanoke Rail-road	60	60
Seaboard and do do	77	77
Appomattox Rail-road	9	9
Winchester and Potomac Rail-road	32	32
Virginia Central Rail-road, including the Blue Ridge Rail-road	138	98
Virginia and Tennessee Rail-road	208	10
Orange and Alexandria Rail-road, including branch to Warrenton, ten miles	100	10
Richmond, Fredericksburg, and Potomac Rail-road	76	76
Greensville and Roanoke Rail-road	21	21
Northwestern Rail-road	120	
Miles	1,455	565
Chesapeake and Ohio Canal	185	185
James River and Kanawha Canal		200
Dismal Swamp Canal		23
Fred'k Valley Plank Road	40	1
Staunton to James River	40	
Boydton to Petersburg	75	
Junction Valley	65	

It thus appears that there are now completed in Virginia 565 miles of rail-road, and 418 miles of canals; and that there are now in the course of construction 890 miles of rail-road, and 220 miles of plank roads. We have, then, the gratifying result, that there are nearly 2,000 miles of rail-roads and canals constructed, or in progress of construction, in our state. The appropriations for these works are already made, and the money has been almost entirely raised at home, without the necessity of incurring a foreign debt. The State of Pennsylvania, to make her improvements, has incurred a debt of near $40,000,000, to pay the interest on which requires a semi-annual

export of over a million of dollars, to be paid the foreign bond-holders. On the other hand, our state debt is comparatively small, and owned chiefly at home by our citizens.

But this view becomes still more encouraging, when we recollect that these improvements will be finished at the farthest within the next four years. As each mile is finished, an increase will be given to the trade of our cities; and when the Virginia and Tennessee Rail-road, the Richmond and Danville Rail-road, and the Seaboard and Roanoke Rail-road are finished, they will be at once connected with a net-work of rail-roads through North Carolina, South Carolina, and Georgia on the one hand, and Tennessee, Ohio, Kentucky, Alabama, Mississippi and Louisiana on the other. It is certainly a source of pride to know that we have quietly effected so much. Speculation would be at fault in estimating the trade that must follow the completion of these works. The rapid increase of our cities will be one certain effect, while the appreciation of real estate, and the profits of every industrial pursuit, will be increased. At the same time the heart of the patriot will rejoice that this acquisition of strength, wealth, population and power must result in restoring the South to her former position in the Union, and may render that Union, as bequeathed us by our forefathers, more stable and firm—its obligations everywhere observed, and everywhere sustained and beloved for the benefits conferred upon its citizens.

Georgia has now 1,000 miles of rail-road—South Carolina is extending her iron arms in every direction, and in two or three years every part of the state will be provided with rail-road facilities. North Carolina has giant schemes on foot, which she is prosecuting with a giant's strength. Tennessee will soon extend the Virginia rail-road, and the rail-road extending from Charleston and Savannah to Chattanooga, to Memphis, on the Mississippi. Alabama, Mississippi and Louisiana are seeking connections with these roads, and soon we shall see the South more highly improved by rail-road facilities than the North, owing to the level nature of the country and the cheapness of labor and materials in the South. Charleston alone is moving with far-seeing sagacity for this increased trade. We feel pride and pleasure in her means, and we heartily hope she may prosper in her former enterprise to establish direct trade by means of ships and steamers owned by Southerners. We believe there is space enough, and a back country sufficiently ample, if we are true to ourselves, to secure the prosperity of all our southern towns; and their prosperity, so far from causing us to fall, will but add to our own prosperity. But how can the people of Virginia hope to contend with Charleston in the generous competition for this trade, unless equal facilities are provided in our harbors for shipping directly to Europe? If we pause in the contest, the trade will have been fixed in the direction of Charleston, and we may strive in vain to regain what is strictly our own.

To illustrate the advantages to be anticipated, we may refer to the enlightened and enterprising commonwealth of Massachusetts. The large expenditures made for the construction of rail-roads, and the

results of that system, has there vindicated the wisdom which dictated it.

In that state the length of rail-roads in 1840 was 433 miles—it is now 1,033. The value of property in the several counties of the state has increased from $299,878,329 in 1840, to $590,531,881 in 1850—an increase in the value of property during ten years of $290,653,552, or about one hundred per cent.

In Boston, which is the centre of the whole system of Massachusetts rail-roads, the following result is obtained:

	Population.	Wealth.
1840	171,992	$120,114,574
1850	269,874	266,646,844

Showing an increase of 60 per cent. in population, and 140 in wealth.

Looking at the commercial returns from our own ports, the seaports of Virginia do not appear to have increased with that rapidity which the general prosperity of the state would indicate: indeed, our direct imports appear to have diminished. These unfavorable indications are, however, contradicted by the positive gain in the assessed value of real estate, and by the increased value of subjects of taxation within the state. The stagnation of our commerce is to be attributed to physical obstacles which separate the productive interior from our seaboard, whilst the enterprise of other states and cities has actually constructed improvements for the mere factorage of our produce, which we would not undertake for the positive increase of the fee simple value of the property, and the exclusive commerce of its enhanced products.

It is thus that towns in Western Virginia have sprung up, manufactures have been established, minerals have been made available, agricultural produce has been created, all of which seeks a market in the cities of Cincinnati, New-Orleans, Philadelphia, and Baltimore; whilst even Savannah, in Georgia, has participated in those productions of Virginia, which could not have paid the cost of exportation eastward to the Chesapeake cities of Virginia. The cities enumerated have supplied the Valley and Western Virginia with merchandise in exchange for its productions. The commerce of Virginia, like some fountains choked up and neglected, cheers with its scattered streamlet every region except that to which its free and fertilizing current would naturally and gladly have directed itself.

We cannot make this valuable, though dispersed trade, the subject of exact estimate. It is reflected in the increased population and taxable resources of the state, so lately the subject of elaborate exposition in the constitutional convention.

We select, however, for illustration of its value, and of the obstacles which impede its exportation, the trade on the Monongalia. This river has been improved by lock and dam, so that steamers can ascend probably within the limits of Virginia. Its trade will compare favorably with that of many rivers in Eastern Virginia; yet the natural line of exportation of its products, is by the Ohio and Missis-

sippi rivers, the Gulf of Mexico, and coast of the Atlantic, to the markets of the East, or to Europe. The aggregate line of water transportation from Clarksburg, in Harrison county, to New-York, is not less than 4,000 miles. The time employed is not less than ninety days; yet the direct line of transit to the Chesapeake, would not exceed 400 miles, whilst the time in reaching market might be reduced to a few days. Baltimore is providing a means of direct transit to accommodate this region of country, much of which has heretofore traded with Philadelphia; but after Baltimore shall have loaded her vessels with this product of Virginia, and supplied in return the merchandise for its consumption, she will be compelled to send it within the territory of Virginia for exportation to the outlet of the Chesapeake.

A similar difference between the natural and artificial communication of that part of Western Virginia bordering on the Ohio River, and of the valley of the Kanawha with the Atlantic cities, will be found to exist, whilst a small portion of southwestern Virginia sends produce to Alabama and Georgia, purchases groceries in New-Orleans, and imports its merchandise through Charleston, South Carolina. Let it be remembered, that this is a trade to be developed. The land is not a wilderness, requiring the life and labor of generations to reduce it to efficient production. The trade already exists. It has grown up under obstacles. It has been driven from its natural outlets, to enrich a distant and foreign interest in other states. But the fact of its development under such disadvantages, proves that it may readily be secured, whilst the anxious interest of the whole West proves the alacrity with which it would co-operate in the regeneration of the commercial interest of the Virginia cities.

There may be persons, however, incredulous that the trade of Virginia, now exported from northern, western and southern cities, can be directed to the ports of the Chesapeake. It will not be doubted that the greater portion of the products of the valley and Western Virginia are destined for consumption in the northern states, or in Europe. These products would adopt the most direct line of transit between production and consumption, but for the natural obstacles which intervene and condemn them to the tedious, tortuous and perilous navigation of the rivers and coast. The direct line of transit would pass through the Chesapeake ports of Eastern Virginia.

So long as the route of the water-borne produce of Western Virginia was cheaper than any artificial line of direct transit, any attempt to divert that trade might have been hopeless. The opinion that no rail-road could succeed, unless it connected populous points, by a short line, has been reversed by experience. Considering the rail-road and locomotive almost as a revelation for the South, we may be pardoned for referring to the causes which are now producing through their agency, such important social, commercial, and political results. Time has become an essential element in the value of merchandise and staple productions. No producing region, and no mercantile community, can adopt a slow and circuitous delivery in competition with others producing or vending the same articles with greater facilities of transportation than themselves. Travel and postal commu-

nication now tolerate no delay or impediment. It is impossible to present any formula to show how far shortening the time of transit is equivalent to a positive reduction of freight. The telegraphic and express lines, every where well sustained, prove the estimated value of time to be very great; though it varies, of course, with the fear of competition, with the value of the commercial subjects, and with the relative importance of individual transactions. But we see from the opening of the artificial lines of Boston, New-York and Philadelphia, that the commercial patronage of the interior is immediately transferred to the most rapid and direct lines of outlet and intercommunication. It is thus that the great cities of the North have severally penetrated the interior with artificial lines, until they have taken from the open and untaxed current of the Mississippi the commerce produced upon its borders. These great artificial outlets have been competing amongst themselves for the commerce of the interior, until they now offer, not only superior certainty, and reduced time of delivery, but they offer upon many articles cheaper freights than the river and coast routes referred to. We copy from the New-Orleans Crescent a notice of the reversing of the natural current of trade, resulting from the construction of the great artificial lines referred to:

"For years past cotton has gone up the Ohio River from Tennessee, through the Pennsylvania and New-York canals, to all the factories in the interior of these states, and often the cities of Philadelphia and New-York. We recollect, last September, of one shipment of upwards of seven hundred bales, shipped from Louisville, via the Ohio and New-York canals to New-York city. The freights were less than by the way of New-Orleans, and the difference in exchange and insurance was near two per cent. in favor of the northern route.

"The amount of cotton that passed up the Ohio last year is estimated, by one familiar with the trade, at sixty thousand bales. This season, nearly all the boats from the Tennessee and Cumberland Rivers, bound up the Ohio River, are freighted more or less with cotton. The packets between Memphis and Louisville and Cincinnati, of which there are several lines, take cotton up the rivers nearly every trip.

"The quantity of tobacco that takes its course up the river from the Lower Ohio, for the eastern markets by northern routes, is rapidly increasing. That raised in Ohio and Kentucky, above Cincinnati—and among the latter, the celebrated Mason county tobacco—nearly all goes by the way of the canals to the Eastern markets. By a statement recently published, the difference in the cost of transportation from Louisville to New-York is four to five dollars per hogshead in favor of the northern route, while the article escapes the sweat which it undergoes on ship-board while passing through our latitudes.

"Grain is now carried from the Wabash to New-York by the canals, at the same cost of freight as is charged by the way of New-Orleans; but by the northern route, they incur no waste, no risk of damage by heating, and save the whole cost of sacking, for it is carried in the bulk, and the same number of measured bushels are delivered in New-York as are received on board the canal-boat from the

shipper. The lard, pork and flour from the same region are taking the same direction. Last autumn the rich regions of Ohio, Indiana and Illinois were flooded with the local bank notes of the Eastern states, advanced by the New-York houses on produce, to be shipped by them by the way of the canals, in the spring.

"These moneyed facilities enable the packer, miller and speculator to hold on to their produce, with the opening of navigation in the spring, and they are no longer obliged, as formerly, to hurry off their shipments during the winter by the way of New-Orleans, in order to realize funds by drafts on their shipments. The banking facilities at the east are doing as much to draw trade from us as the canals and railways which Eastern capital is constructing.

"All the lead from the upper Mississippi now goes east by the way of Milwaukie. But the most recent and astonishing change in the course of the northwestern trade is to behold, as a friend tells us, the number of steamers that now descend the upper Mississippi, loaded to the guards with produce, as far as the mouth of the Illinois river, and then turn up that stream with their cargoes, to be shipped to New-York via Chicago.

"The Illinois canal has not only swept the whole produce along the line of the Illinois river to the east, but it is drawing the products from the upper Mississippi through the same channel: thus depriving not only New-Orleans, but St. Louis, of a rich portion of their former trade."

To this we may add the fact, that cargoes of corn have been recently shipped from Iowa, down the Mississippi, along the Illinois canal, by way of the lakes, to the city of New-York.

The cause of this astonishing result may be thus explained.

Artificial lines afford not only the most speedy means of transportation, but the unity and system of their administration gives them great advantage over the efforts of individual enterprise.—They have a basis of travel and mail monopoly, which enables them to discriminate in favor of any specific article of commerce, the factorage and financial results of which may be sufficient to generally indemnify them for the abatement of freight, whilst the revenue of the improvement is sustained by an increased charge upon business not subject to competition, or by the large amount of trade which they command. These exclusive resources, rapidity, certainty and safety of transportation, with the power of discrimination, has enabled these great lines to wrest from the Mississippi so much of its produce.

To establish the capacity of artificial to compete with natural lines, we publish the following tabular statement, showing the contest between New-York and New-Orleans for the trade of the Mississippi:

*New-York and New-Orleans in western trade.**

New-York.	Population.	Canal Trade.
1840	2,429,721	66,303,892
1850	3,093,813	156,397,929

* As these statistics are taken figure for figure and word for word from our Review, we give the reference, the authors of the address having neglected to do so. *See De Bow's Review, August*, 1851.

An increase of 25 per cent. in population, and 150 per cent. in trade, by canals, in ten years.

Produce of West received by New-York Canals,

1842	$22,751,013
1850	55,474,937

An increase of 145 per cent.

Produce of West received at New-Orleans.

1842	$43,716,045
1850	96,897,873

Or an increase of 120 per cent.; or a comparative increase by New-York of 25 per cent. over New-Orleans in Western produce in five years! In the three years, 1848, 1849 and 1850, the receipts at New-Orleans by river were 2,312,121 bbls. flour; at New-York, 8,636,207 bbls. Pork:—New-Orleans, 1,536,817; New-York, 211,018 bbls. Beef:—200,901 bbls., New-Orleans; New-York, 264,072 bbls. Wheat:—New-Orleans, 852,497 bushels; New-York, 8,798,759. Corn:—New-Orleans, 9,758,750 bushels; New-York, 11,178,228 bushels. Bacon:—New-Orleans, 135 millions pounds; New-York, 26 millions. Lard:—New-Orleans, 293 millions pounds; New-York, 21 millions. Butter:—New-Orleans, eight millions pounds; New-York, 97 millions, &c., &c.

We have adverted to these well established facts, and explained the rationale of their operations, to show that the trade of northern cities is derived by artificial ways from the great producing valley of the West. If this be the case—if productions prefer the lakes, railways and the canals of the north to the river and gulf outlet—why should not the produce of Western Virginia, which almost circumnavigate their own state, which pursue a distant, indirect and unsafe line of transit, replete with every danger of river, cape and coast, prefer the direct communications *through* Virginia, and the more congenial destiny of encouraging our own ports? There is no reason. Their anxiety to complete these artificial outlets proves its practicability. All the vast aggregate of trade, now existing in Western Virginia, destined for Atlantic exportation, may be safely added to that which we have already demonstrated as subject to be employed in this great enterprise. We may safely say, that if all the existing commerce of Virginia, for exportation, could be collected in her own Atlantic ports, it would not fall short of twenty millions of dollars, nor would her consumption of merchandise be less. Besides this, the very organization of commercial facilities would guarantee an immense accession of mineral and agricultural productions.

In this connection, we must press upon all interested the indispensable importance of providing for the improvement of the James River, the common outlet of much of the Chesapeake trade. Its obstructions affect the trade of Norfolk, Richmond, Lynchburg and Kanawha; and each of them are alike interested in securing the perfect navigation of this noble stream. Your committee have not chosen to awaken controversy by designating any particular mode by which this shall be done; they are aware that if the interests now ap-

pealed to, shall be convinced of its paramount importance, the means will be readily devised for its accomplishment. The able and comprehensive report of Lieutenant Stansbury, will prove the entire practicability of this work, and the moderate means to be employed in its completion.

We may properly add to these resources, which are directly derived from Virginia alone, the products of the states connected with her, by the lines of improvement now under construction. Tennessee and Kentucky, and North Carolina, will naturally find their most direct outlet through the Virginia and Tennessee, the Southside and Seaboard rail-roads, now under continuous and connected construction to the interior of the state referred to. The prosecution of the Canal or Central rail-roads, or the construction of a branch road into the Ohio Valley, will add much from those quarters; and but a few years will elapse before the perfected facilities will bring this great commerce to the legitimate ports of exportation. We will not enlarge upon the commercial results of extending these lines into the interior of the southwestern states, and the national and international intercourse which will pour through Virginia, invigorating her local improvements, freighting her vessels, and filling her ocean steamers. It will be plain, upon investigation, that no cities south of Virginia have the commercial advantages of our own—none have the varied products, the local patronage, the rapid communication with transatlantic cities. Enterprise is now doing all it can to shorten the line of ocean transit. In this the cities of Virginia cannot compete with Boston or New-York for the transatlantic intercourse of the northwestern states; but the mail and merchandise transportation, with the travel between the great southwest and the cities of Europe, belong legitimately to the Virginia ports of the Chesapeake, and will be certainly secured.

In embarking in this contest her citizens and commercial cities have a high duty to perform; they must shake themselves of every sin of selfishness or of jealousy. They must co-operate with a rivalry of devotion to the common cause. There should be no greater jealousy between Richmond and Norfolk than between Philadelphia and New-York—yet, though separated from each other by a greater distance, the joint population of the two former cities is scarcely equal to a suburb of either of the two latter. There can be no incompatibility of interest in the harmony of these and other Virginia cities. Let them unite their patronage upon the great designs of internal improvement, and upon the organization of a foreign commerce, and their destinies are established.

Yet the competition will be intense. It will require energy, union, and perseverance. The North has enterprise, capital, experience; the South possesses the world staples of cotton, sugar, tobacco, with an immense mercantile consumption. The prize is worthy the efforts of the most gifted intellect, or of the most matured experience. It is a strife to be fought with weapons congenial to the enlightened humanity of the present age. It is a contest fraught with consequences scarce inferior to those which hung upon our first great struggle.

Virginia has the deepest veneration for the Union, a cordial admiration of those sister states with whom she contends for her heritage; but she cannot break the bread of dependence, or sink into the position of an inferior, to those who were her equals.

If the commerce to which we have adverted be not utterly fabulous—if its capacities be not perverted by a mere introduction into our own cities—if the sons and brothers of those who subjected a wilderness to civilization, and gave an empire to freedom, who, braving a deadly climate and a desperate strife, planted the flag of Yorktown upon the Sierras of Mexico, be not utterly recreant to the instincts of their race, then must the glorious and peaceful triumph of commercial independence reward their patriotism and enterprise. The rewards of industry and of enterprise will be reserved to our own citizens, and the shameful tribute be abolished forever.

The committee respectfully recommends the adoption of the following resolutions:

Resolved,—As the opinion of this committee, that lines of mail or other steamers, or other vessels, from Hampton Roads to some port or ports of Europe, ought to be established; and Virginia, North Carolina, Tennessee, Kentucky, and such other southern states as are disposed to aid in the enterprise, should be appealed to; and an appeal should also be made to Congress to bestow upon such line the same mail facilities which are extended to the northern lines; and the bars which now obstruct the navigation of James River, should be removed.

Resolved,—That committees be appointed to memorialize Congress and the legislature of Virginia, and to prepare an address to the public, upon the subject aforesaid, and the great importance to the people of Virginia, and the South generally, that they should conduct their own trade directly on their own bottoms, and with their own men and means.

Resolved,—That lines of packet ships, screw-propellers, or mail steamers, ought to be established between the exporting cities of Virginia, and the West Indies, and South America.

Resolved, also,—That the people of Virginia be requested to hold meetings in their several counties, cities and towns, to effect the object of the foregoing resolution; and that to this end it be recommended to them to adopt some organization by the appointment of standing and corresponding committees, or otherwise as to them shall seem best.

Resolved,—That the merchants of our Atlantic cities ought to import directly to our Virginia ports the productions of foreign countries used and consumed in this and the adjoining states; and that it be recommended to the merchants of the interior, and the people at large, to aid them in this noble enterprise.

ART. V.—INDUSTRIAL REGENERATION OF THE SOUTH.

MARYLAND, Virginia, North and South Carolina, Alabama, Tennessee and Georgia, with many of their southern sisters, are pushing ahead with giant strides.* In the four last mentioned states, there are upwards of one hundred cotton mills in operation, consuming an-

* We think we may add Louisiana and Mississippi before long.—[ED.]

nually more than a hundred thousand bales of cotton. And this fact is manifest everywhere, that agriculture improves just in proportion as manufactures advance. Indeed, to my mind it is a self-evident truth, that it can be rapidly improved in this way, and *in no other.*

Conventions may be held, fairs established, newspapers published, addresses delivered, premiums awarded, still agriculture will languish and remain in a depressed and thriftless condition, until the channels for labor are diversified. Thousands who are now idle, and other thousands who are engaged exclusively in planting, must be employed, in whole or in part, in mechanism and manufactures. And soon we shall witness one of the most remarkable transformations ever experienced by any people. The South will rise, Antæus-like, from all her defeats, with renewed activity, and speedily become, as, from her natural advantages, she always deserved to be, "magnificently rich and gloriously independent." "Instead of the thorn shall come up the fir tree: and instead of the brier shall come up the myrtle tree;" and our sunny South shall again blossom as the rose.

Will the South, the chivalrous South, remain longer in a condition of colonial servitude? With such means of independence within her own borders, why should a revolution in Europe, the condition or caprice of the bank of England, put down the price of her great staples? It is unreasonable. Equally unmanly is it, to stand still and complain, and suffer anxiety on account of the anti-slavery fever of the North. Let her at once adopt the only sure and safe remedy for all these evils.

And why despair of success? Nineteen hundred and five years ago, Julius Cæsar invaded Britain, then a nation of savages, the country covered with forests and marshes, its inhabitants living by the chase, and its princes dressed in skins; now, her capital is the metropolis of the world. And, to borrow the forcible expression of one of your own writers, she might now buy Italy as a farmer purchases a field. Not long since, one of her merchant princes had it in serious contemplation, to acquire the whole of Palestine, and thus become the sole owner of the land where the tribes of Israel dwelt, and where Solomon reigned over four millions of subjects.

The wool of England, which at present constitutes the staple commodity of the kingdom, amounting in value to £21,000,000, and employing 350,000 persons in its manufacture, was, a few centuries back, sent to Bruges and other Flemish cities, to be returned in broadcloths and other products. Germany furnished her with hardware, clocks and watches; Italy with glass; China with porcelain; and France with mirrors, silk and paper. But England went to work herself. She invited over weavers, fullers, dyers, and every species of artisans, from all parts of the world. She legislated, she made treaties, until now her success is complete. The skill and ingenuity of her craftsmen, the elegance and cheapness of her manufactures, her cities and towns, her palaces and private dwellings, her roads, bridges and canals, her improved agriculture, her domestic production, her foreign trade, her public credit and private wealth, are the admiration of all,

and prove her to be the most prosperous and powerful of the family of nations.

Why, I ask, should we not attain to the same perfection? Let every public functionary, every capitalist, every private citizen, respond to this question. Our country abounds with all the great elements of prosperity and wealth. Water, wood, coal, and mountains of marble, minerals and metals of every description; a soil and climate without a parallel. Let us at once, then, cease to talk, and begin to act in earnest, by resorting to those measures, that will not only induce our population and property to remain at home, but which will encourage mechanics and capitalists to settle among us. Objections may be interposed to the execution of these projects, the realization of these hopes; but who doubts the wisdom and liberality of the people to adopt every useful scheme, to sustain and support any proper plan, which will conduct to this goal?

I assume, then, as an incontrovertible proposition, that our Southern people must, to a certain extent, abandon their accustomed paths, and devise new plans for their future prosperity; that the interest of agriculture, laying aside every other consideration, imperatively demands a diversity of employment; in short, that manufactures must be combined, to a great extent, with agriculture; the one stimulating the other, and contributing to its emoluments. As an indispensable support and encouragement to agriculture, we must increase the class of consumers among ourselves; and we must abandon prejudices, however deep-rooted, against this new order of things. The stand-still doctrine must be forsaken, and, forward, forward, be henceforth the watchword.

What, I would ask, has converted every acre of land in England into a garden?—crowded every sea and harbor in the known world with her ships? Certainly not her agriculture. Neither has it been by the operations of commerce, as the hand-maid of that agriculture. It has been brought about by importing the raw material from other countries, and manufacturing them at home: reserving so much as she needed for domestic use, and exporting the surplus for foreign consumption. She has managed by this means to shut out foreign manufactures; kept the balance of trade generally in her favor in all parts of the earth, and secured all the profits arising from the raw material, as well as the manufactured article passing entirely through the hands of her own people. Without raising one pound of cotton at home, she has a population there of four millions directly or indirectly dependent on this trade. But suppose she could have grown her own cotton, and that its value, when manufactured, would have amounted to more than three times the worth of the raw material; would she, think you, have deprived her own population of this source of profit and employment to so many millions? Considering what a great variety of operations the raw material undergoes, and the hundred different hands through which it passes, before reaching the consumer, would she not have secured these widely diffused benefits to the industrious of her own community? Such has been her uniform policy in relation to wool, iron, and every other article which her

island produced. And such, permit me to add, will be our policy, unless dim-sighted, yea, absolutely blind to our own best interest.

England has been much more enriched by taking in exchange cotton and other commodities of foreign growth, for her iron, steel and cotton goods, and other manufactures, than to have been repaid in gold and silver: by furnishing employment to multitudes in their preparation, and then exporting the wrought goods to the same countries whence the raw material was originally brought. But we are capable of producing most that we consume. To *breed*, *raise*, and *manufacture*, then, as much as possible, within herself, is the true policy of South Carolina—is the true policy of every state. Did you ever know a planter who produced at home all he *consumed*, *used*, or *wore*, that did not prosper? Did you ever know an execution for debt levied on the property of such an individual? Nations are but an aggregation of individuals. It was a favorite maxim with that rigid economist, Cato the Censor, that a farmer should be always seeking to *sell*, rather than to *buy*.

I had supposed that the principle was well settled, that no commerce was so disadvantageous as the exchange of the raw material by the producer, for the manufactured goods of another country. And that, other things being equal, that nation would always prosper most which gives profitable employment to the greatest number of its inhabitants; or which, in other words, raises the raw material, manufactures them, and carries in its own vessels these commodities to foreign markets; and that for the obvious reason that in this way all three of the industrial pursuits—agriculture, manufactures, and commerce—are alike sustained and supported. Nations may flourish temporarily by any one of these pursuits; but history demonstrates that such prosperity cannot be permanent. Egypt was once the most enlightened as well as the most fertile country in the world; but this ancient granary has long since been debased to a land of slaves, without a prince of her own, and ground under the yoke of a most galling despotism. Carthage flourished for seven centuries by commerce; but was ultimately blotted from the map of nations. And Cicero, in his Republic, attributes her weakness to her exclusive preference for trade and navigation, instead of agriculture. Great Britain, by combining agriculture and commerce with her manufactures, has outlived the ordinary duration of kingdoms purely manufacturing. But she has well nigh reached her meridian. And as colony after colony separates from her (and which of all of them ultimately will not?) even the land of Cromwell, and Pitt, Peel, Nelson and Wellington, must submit to have *Ilium fuit* inscribed upon her once proud escutcheon.

This is the only nation, ancient or modern, which, from the extent of her sea-coast—the exhaustless fertility of her soil—the variety of her climate, extending through twenty degrees of latitude in the most favored zone, and countless physical advantages, is capable of perpetuity. Whether she is destined to it is a problem which remains to be solved, and which is wisely, perhaps, concealed in the impenetrable veil of futurity. And not only are the United States, as a whole, thus blessed, but many of the individual members of the con-

federacy, especially the Middle and Southern Atlantic states, have this independent self-existent life within them. They could each constitute a world within themselves. There is scarcely a vegetable, or fruit, or cereal grain, which may not be successfully cultivated in South Carolina and Georgia.

But I go further still, and maintain that that is undoubtedly the most injurious species of traffic which introduces from abroad the same articles which we can produce equally well, or better, ourselves, especially if we are abundantly able to make a sufficient quantity to supply our own consumption. Better to establish cotton, woollen, iron, leather, paper, and all other manufactures, in which we can ultimately equal or surpass others, at great expense to ourselves at the beginning, and apparently even at losing rates, than be permanently dependent on others for them.

If these doctrines are well founded, (and we have great confidence in their soundness,) it is manifest that the South has paid toll from the sweat of her face long enough. Her cotton fields extend from Southern Virginia to the Rio Grande, and embrace ten states, and more than 500,000 square miles, sufficient of itself, perhaps, for the population of the whole earth, if properly managed. An average crop of cotton, in the United States, is usually estimated at 2,300,000 bales, which, at six cents, the average price, is worth 55,000,000 dollars. The same crop, when spun and wove, will bring 180,000,000 dollars, instead of 55,000,000, when sold as raw material. And this immense difference has been nearly all loss to us. Is it not startling? Who doubts that the growers' labor has been greatly sacrificed? Indeed, it has been almost entirely swallowed up in charges. And this process must continue until the producer and consumer—that is, the planter and manufacturer—can be brought nearer together. The planter will always be impoverished, until he ceases to be taxed so enormously for the support of that numerous class who are engaged in the intermediate work of conversion and transportation.

Why, then, should we continue to ship our raw cotton abroad, to be spun and wove and brought back to us to be worn, at an expense four times as great as it would cost to do the same thing at home? And that, too, when we have so many poor in our midst, stinted for food and raiment for want of work. The very idea is preposterous that 200,000 bales of American cotton should be wrought, every year, into yarns in England, and thence transported to Germany, to be converted into fine fabrics, at a gain of twenty millions of dollars to England. Why should we not work up our own cotton into yarns, and transport them in our own ships and sell them to the Germans?

In ancient Rome, five acres was the ordinary size of a farm for the sustenance of a family; and in Flanders now, the same quantity is considered ample for the support of the household, besides affording a considerable surplus for other purposes. And shall South Carolina, comprising within her borders 16,000,000 acres of land, of which only 1,300,000 are cultivated—with as many acres to the man, as there are men to the acres in Europe, continue to be drained forever of her life-blood for foreign flour, Indian corn, oats, peas, potatoes,

rye, barley, and almost every other article of consumption? Her consumption of imported iron, exclusive of cutlery, exceeds 2,000,000 dollars per annum; and yet she has inexhaustible quantities of ore of the very best quality. She consumes 2,500,000 dollars worth of leather, four-fifths of which are furnished from abroad; and yet she possesses all the materials necessary for tanning in the utmost profusion. For shoes and boots alone, she expends abroad, yearly, 1,081,709 dollars. Could not this vast sum be kept at home?

Notwithstanding the importance of the subject, owing to the lucid and masterly argument submitted to the public in this place, twelve months since, I do not deem it advisable to occupy much of your time, in demonstrating the capacity of the South to compete successfully with Old or New England, in the manufacture of cotton. When we take into the account the difference in the cost of the raw material in these different markets, the price of labor, fuel, water-power and subsistence, the advantage in favor of the South is tremendous. Indeed, the rapid increase in this branch of business, within the last few years, among us, has demonstrated conclusively the practicability of the matter. If there be a deficiency in skill at present, we are abundantly able to procure it. And the many inducements we offer, when properly understood and appreciated, will bring it to us from abroad, until we have time to rear it up at home. *No bankruptcy has occurred, within my knowledge, in any cotton company at the South. And while seventy-one mills are reported to have stopped, within thirty miles of Providence, Rhode Island, and numerous others have either ceased to run, or are put on short time at the North, on account of the high price of the raw material, or some other cause, some of our companies are declaring a dividend of ten per cent. on the business of the last year.* These facts are sufficient to put to silence all speculations on the subject. Doubt it who may, the South is destined soon to become the seat of the cotton manufactures of the world. The competition has been forced upon us, and our people are beginning to be thoroughly aroused from their apathy.

It has become fashionable of late, just in proportion as cotton mills have multiplied at the South, for northern newspapers and periodicals to abound with essays, the object of which is, to caution the South and West against mistakes and misrepresentations, as to the profits of cotton manufactures. Not that the writers are opposed at all to their extension, but they are concerned, lest amid the powerful impulse that has been given to public opinion and the employment of capital in this business, that we should be tempted in our enthusiasm "to leap in the dark." And, a gentleman of large experience and a thorough practical knowledge, we are assured, of the whole matter, and one who bears a name not altogether unknown to fame, has condescended, through one of the popular magazines, to enlighten his countrymen, by his pen, upon this subject.

Timeo Danaos et dona ferentes.

We fear the Greeks, even when they offer presents. The bitter past has taught us the painful necessity of being on our guard, even

against kindness, when thus volunteered. Facts fortify us against these fears. What has covered the rock-bound coast and bleak hills of New-England, in despite of her rugged soil and rigorous climate, with marble mansions, and all that is beautiful in art and comfortable in civilization? Her manufactures in cotton, alone, are computed to have added not less than 300,000,000 dollars to the stock of her wealth within the last thirty-five years.

For the present, we are content for Europe and the North to monopolize the manufacture of prints and lawns, but the irrevocable decree has gone forth, that the South has resolved that the coarser fabrics and yarns are to be wrought here; and that we will do this, not in the spirit of a just retaliation, but in order that our own surplus labor may find employment; that we may make exchanges with India and China for our silks and teas, until we can supply ourselves at home with these articles; with Brazil for our coffee; and with all the rest of the world for the necessaries and luxuries of life, which we are unfitted to produce ourselves; and more especially that we may have a market at our own door for our agricultural products.

We find, that for our agriculture to flourish, we must have a market everywhere; and that it is people and not a place which makes the market; that the nearer this is found to the farmer's door the better; that he is impoverished in spending so much time and money in getting his breadstuffs to distant markets; and that rather than submit to existing evils, we are prepared to import the men and machinery, until we can raise up and qualify the one, and acquire competent skill to construct the other.

The recent developments in England furnish a strong inducement to the South to embark immediately and extensively in the manufacture of coarse cottons and cotton yarns. There is a settled conviction in that country, that with their present and future prospects as to the supply and price of the raw material, their manufactures must run, more than they have done in former years, on finer fabrics; that they must yield the lower numbers of cloths to us, *because we are nearer the material;* and that, consequently, their consumption of raw cottons must tend to *decrease*, rather than *increase*. The same result will be true as to the continent. And it is believed, and, I think, on good authority, that this change will be permanent, and that the falling off in the consumption of raw cotton from this cause alone, will not be less than one-third.

If England and the continent, then, are compelled to retire from the manufacture of coarse cloths, of which the raw material forms so large a portion of the value, not only the manufacture of these fabrics, but the *markets* for them, must be transferred to others. Shall we succeed to them, or sit idle, while the waters are troubled, and see others step in before us?

With our capacity for this business, it would be a burning shame not to avail ourselves of the opening thus presented. A lethargy, which nothing can excuse, will alone deprive us of this advantage. The demand for coarse, heavy, cheap cotton goods, will not only be sustained, but steadily increased, as they shall be substituted for flax

and other materials in Russia, Germany, Ireland, and other parts of the world. And in this form, the great bulk of this staple will always be consumed. Let England and the continent, for the present at least, continue to spin yarns, of which the raw material costs but *one-twentieth* of the finished price, and to run spindles that do not produce *two pounds of yarn a quarter;* and the North monopolize, for a few years longer, the calicoes and dimities; but let us at once enter with hearty determination upon the work of using up the body of the crop, in ginghams, checks, osnaburgs, and coarse yarns; and the effect will be, to furnish a better market for the planter, than Liverpool or Lowell, as well as a home market for every description of produce. The trade and commerce of our sea-ports will flourish; our rivers will be rendered navigable; rail-ways and plank-roads and turnpikes constructed, not only to connect the towns and counties together by the internal circulation of trade, but to afford an easy and cheap conveyance to the ocean, at every accessible port.

It is almost impossible to realize the effect of a manufacturing establishment of any sort in fostering the various branches of trade and business, in producing comfort, refinement and intelligence, and in stimulating the growth and populousness of the surrounding country. The evidences abound in every section of the Union, where the experiment has been made. First, the factory goes up; and soon it is surrounded with a beautiful village, with its hundreds, perhaps thousands, of clean, contented and thrifty inhabitants; then comes the hotels, the churches, the schools; next, the machine-shops and mills of every variety, the stores, post office, and, perhaps, finally, the savings bank. Old debts are paid off and litigation dried up, for every body has money and to spare; lands rise in value, from fifty to one hundred per cent., in the neighborhood; for there is a market not only for grain, and articles which will bear transportation, though at a ruinous loss to the producer, but for heavy articles, that will not admit of transportation, and also for every cucumber, cabbage, and quart of milk, that can be spared. It was published in the papers, during the past summer, that one of the large hotels in the city of New-York consumed daily, besides bushels of berries, twelve hundred eggs, five hundred quarts of milk, and from five hundred to a thousand pounds of beef. Now, every manufacturing establishment is an *Astor* or an *Irving House* to the surrounding population. Let, then, the cotton mill and the cotton field, and that most formidable of all trios, and most holy of all alliances, "the plough, the loom and the anvil," be brought together.

Who can estimate the good the founders of one of these establishments has done to his species? How many politicians render equal service to the state? Such men may not have a place on the page of history with the conquerors of Mexico, but posterity will rank them with the benefactors of mankind. The friends of free trade are said to have made to Mr. Cobden, its great advocate and champion, a donation of near a million of dollars; and I rejoice at the precedent. It is high time that fortunes and honors should be

bestowed on those who have taught successfully the arts of peace—the true criterion of national glory—as well as upon military chieftains. The day is not distant—and I rejoice at the fact—when the highest distinctions will be conferred on those who have done most to multiply the means of subsistence, and to impart them to the rapidly increasing millions of the human family.

And was there ever such a people as the Americans for boldness of conception and indomitable perseverance? Their minds partake of the rivers, water-falls, and mountain scenery of the country. Every individual aspires to be the founder of a city, the conqueror or lawgiver of a nation—a Romulus, Cortez, or Solon. And there is not a pettifogger, who has fled the country for debt or crime, that cannot construct a wiser constitution than the immortal John Locke framed for the *province* of South Carolina. Nor is it true that covetousness alone begets this spirit of adventure. It would be folly to deny that the men who thus embark with their time, and talents, and fortune, look to remuneration. Still, there is much patriotism and philanthropy mixed up with all these enterprises. These pioneers rejoice in the thought, that they are not working for themselves alone, but are aiding in laying, broad and deep, the foundations of a glorious empire; and that they are assisting, in the best possible mode, in feeding the hungry, clothing the naked, and giving eyes to the intellectually blind.

But it is objected, that these manufacturing establishments will become the hot-beds of crime, where it will shoot up in alarming luxuriance, to corrupt and destroy the public morals. But I am by no means ready to concede that our poor, degraded, half-fed, half-clothed, and ignorant population, without Sabbath-schools, or any other kind of instruction—mental or moral—or without any just appreciation of the value of character, will be injured by giving them employment, which will bring them under the oversight of employers, who will inspire them with self-respect, by taking an interest in their welfare. My own personal experience and observation are directly the reverse of the opinion which I am combating; and I could state many interesting facts, in corroboration of the belief which I entertain. After all, the most powerful motives to good conduct, is to give suitable encouragement to labor, and to bestow proper rewards upon meritorious industry.

Did time permit, I should take great pleasure in urging upon my fellow-citizens the propriety of engaging extensively in various other industrial pursuits; believing confidently, as I do, from careful investigation, as well as upon the experience of the most enlightened and practical men, both in the feasibility and profitableness of these branches of industry.

Is there any good reason why the leather and shoe business should not be extensively prosecuted at the South? It ranks as the fourth, after cotton, wool and iron, in Great Britain; and it is questionable if it be not superior to the latter, even there. In this country, it holds a still higher rank; and we have a *natural* guaranty that this business never can become unfashionable, or be overdone. With

our forests for bark, and facilities for conducting this branch of manufacture advantageously, why, I would earnestly inquire, should it not be undertaken at once? All the experiments hitherto made at the South have proved eminently successful. All that we lack is a few Zadock Pratts, to lead in this business. When we reflect to what a variety of uses leather is applied, in the implements of war, husbandry, and the mechanic arts, the structure of machinery, the furniture of houses, articles of clothing, books, hats, caps, harness and carriages, there is no single material, it has been truly remarked, except cotton, which is so much needed, or needed in so much plenty. Without it, or without it in the plenty which we have it, what would the world do? What a wide field for commercial enterprise—to exchange our cotton goods for the raw hides of Texas, Mexico, and South America!

I have no means at hand of ascertaining the value of the leather and shoe manufactures in the United States. In England, it is estimated at upwards of 60,000,000 of dollars; and it is computed that more than 250,000 persons are employed in its various departments. And it is in the way here detailed, that she has built up Manchester, Birmingham, Leeds, Sheffield, and scores of other towns, constructed her India docks, and other commercial wonders, which overshadow, by comparison, the proudest monuments erected by ancient kings and emperors.

The iron and paper business, and sheep-husbandry, to pass over all other commodities, for which our climate and invaluable resources are so admirably adapted, have been too long overlooked and neglected. As it respects wool, it has been triumphantly shown, that millions might and ought to be realized at the South from this one article; whether we consider the health and longevity of the sheep, the texture and weight of the fleece, the cheapness of subsistence, or the great profits which would result to this section, from this business; that we can compete successfully at it, if not outstrip any other region of the country.

ART VI.—THE LATE HENRY A. BULLARD.

Several years ago, when publishing the various documents appertaining to the Historical Society of this state, we introduced in our pages some extracts from an eulogium, pronounced by Judge Bullard upon the Hon. F. Zavier Martin, President of the Society. Judge Bullard having since paid the debt of nature, occupying the same position, we feel that it is but just to his memory, associated as it is with so large a part of the History of Louisiana, to incorporate the following biographical sketch, prepared by our friend, V. H. Ivy, Esq., at the instance of the law graduates of the University. Neither Mr. Ivy nor ourselves agree with the political tenets held by Judge Bullard; but find nothing in that to militate against our high appreciation of his learning, his talents, and his constant and unwavering services to the state. The gloom of the grave covers up every honest difference, and leaves in our hearts but the vivid memory of the scholar—the jurist—and the man.—[Editor.

Mr. Bullard was born in the town of Pepperell, in the State of Massachusetts, on the 9th day of Sept., 1788. His father was a clergyman of the Presbyterian order of Christians; and on the mother's side he was closely connected with the distinguished family of the Adamses, whose deeds were so conspicuous in our revolutionary war, and whose name is identified with the history of the republic.

At a suitable age he entered Harvard University, and graduated in the class of 1808. He attained here, not only the most distinguished honors which that institution could confer, but acquired all the learning which it could impart; and in the rudimental and classical education which he here obtained, he not only laid the foundation of his subsequent extensive political, legal and general information, as well as pure taste and correct judgment, but also formed the habit, which attended him through life, of laborious and unremitting application. His family being possessed of limited means, he remained about the college for two or three years after he graduated, and some of this time acting as usher in the institution, yet always studying and perfecting himself in classical literature, and in the modern languages, especially in the French and Spanish. At a later period he acquired a knowledge of the German and Italian languages.

Leaving here, he came to Philadelphia, where he read and studied the common law in the offices of David Paul Brown and David Ingersoll, who was a contemporary of Rawle, Lewis and Dallas, then the greatest luminaries of the Philadelphia bar; and in due time he was admitted to practice his profession. We now find him, at the most critical period of his life, a young man of vigorous mind, with a liberal education—with such a legal preparation as we may suppose he would have under the auspices of Brown and Ingersoll—full of the high hopes and aspirations which the fame and example of such men would excite; and yet, without influential relations and friends to give him the first impulse, without which so many of the noblest and best so frequently fall into despair. About this time Mexico was in revolution against Spain. The spirit which had accomplished the independence of our own country, was convulsing Mexico like a troubled sea. The Spanish monarchy had become more intolerable than ever under the order of things effected by the power of the great Napoleon. Hidalgo and Morales had given the ball of revolution a mighty impetus; the whole country was in arms; Mexican patriots could look to the people of no country for such kind sympathy as to the people of the states of this Union. And here they *did* find that sympathy which our countrymen never withhold from the subjects of despotism.

Toledo, one of the Mexican revolutionary generals, was at this time in Philadelphia, seeking recruits, and such means as he could, to sustain the cause of the patriots. Where could he find one better adapted to his purposes than the young Bullard? His knowledge of the Spanish language introduced him to that officer. His ardent and daring soul, and his classically stored mind, chafed with the desire of

activity in that splendid arena of talent—the Philadelphia bar; yet it chafed in vain. Thus anxious, yet restrained, he was fascinated with the splendid pictures painted by the imaginative mind of the Spanish revolutionary soldier. Can we wonder what was his course? He joined Toledo. His energetic character and full education so strongly recommended him to that officer, that he placed him on his staff, and made him his military secretary and aid-de-camp. He proceeded with the general to the western country, and passed most of the winter of '12 and '13 in Nashville. In the spring, he accompanied the recruits down the river to Natchitoches. They soon after entered the Mexican territories, and joined other patriots, who were assisting the people to throw off the Spanish yoke, and establish a republican government. The country at this time was in full revolution. Several hard battles had been fought, and the Spanish forces, sorely defeated, had mostly retired. Aredondo had command at San Antonio and the vicinity; he was dislodged from his position and driven back. Don Bernardo Gutierez, with Cols. Kemper and Perry, commanded the patriot forces. When Toledo came with his reinforcement, he was appointed to the chief command. Young Bullard was high in the favor of the commander-in-chief, and intimately connected with him in the capacity of aid-de-camp and secretary. Aredondo was preparing to meet the republican forces. The Spanish troops rallied under him, and on the 13th of August, 1813, a general engagement was brought on near San Antonio. It was soon ascertained that the forces under Toledo, composed of new recruits, refused to co-operate, and the defection was discovered in the ranks. This portended defeat to the patriots; and, indeed, after some hard fighting, a retreat commenced, which soon became general. Toledo and his followers had to retire before the Spanish veterans. This broke up the expedition; and the Americans who had joined him returned to the United States. Bullard, with a few of his companions in arms, reached the American frontiers, after encountering many hardships and dangers, and came to Natchitoches, destitute and worn down with fatigue and sickness.

Here he paused: he found himself destitute, and in a strange country, without a single friend able to help him. His brightest hopes were blighted: his wildest and fondest dreams dispelled: his high aspirations checked. The beautiful fabric of name and fortune, which his fine mind and hopeful heart had built, lay a wreck at his feet. Though despair assailed, it did not conquer him. Adversity is a terrible tyrant; its blows are overpowering and remorseless when aimed at the weak; but when it wrestles with a man like Bullard, and puts forth its mightiest efforts to subdue, it only fires the soul, and nerves the arm, and makes him a conqueror.

Mr. Bullard had now to commence his career anew: his education and his talents were the only means left him. With these he sustained the severe but triumphant struggle with the adverse circumstances which surrounded him. He opened a law office; and his knowledge of the French and Spanish languages soon enabled him to become acquainted with the leading and most influential citizens of

that ancient town of Louisiana. They were nearly all of French and Spanish origin: the town itself having been originally settled by the Spanish. They were hospitable, and mostly wealthy; and that section of the country was then the most flourishing portion of the state.

He had, on completing his education, studied the elements of the Roman civil law, and had assiduously applied himself to the study of our civil law. As nearly as possible, he made himself master of the Napoleon code, and the Louisiana code of 1808; and was familiar with the leading authors on the civil law, Domat, Pothier, Toullier, Merlin, Sirey, and others. With this capital, in a rich community, and speaking the language of the people, he attained their confidence; and his business increased until he had even more than he could attend to. And though continually in the discharge of a practical, laborious and exhausting business, he never forgot nor neglected the classics, history and literature, and the more abstruse studies of his profession.

We now find him about to realize the fortune to which he had never ceased to look forward. He now married; and from this marriage there were five children—two sons and three daughters, who are all living. The parents possessed no wealth at the marriage; yet, at one time since, they had amassed a considerable fortune. The children were all well educated, and well provided for in their youth.

Having devoted the latter half of his life to public affairs, his pecuniary matters suffered, and the ample fortune which he had accumulated in the earlier part, became much embarrassed.

He had not been long at the bar in Louisiana, before he was appointed one of the district judges, which office he held about three years, when he resigned it to resume his practice. In 1822, he was elected to the legislature of Louisiana, and served for two years. In April, 1826, he was again appointed to the judgeship of the sixth district court of the state, which he filled until the 1st of July, 1830, when he resigned, and was elected to the Congress of the United States from the western district of Louisiana.

While on the bench, even as district judge, his decisions cast much light on the jurisprudence of the state. He was in the constant habit of investigating every legal question arising in the civil law as administered in Louisiana. His great learning well suited him for this, and his habits of industry and legal inquiry and research were laborious and unremitting; judicial labor was more severe then than now. Our system of jurisprudence had not then been elucidated by the searching and thorough investigations of the great jurists who have since spent so much time and study upon it, and who have left the results of their labors in our reports.

As a member of Congress, Judge Bullard was active and efficient: he took a lively interest in the exciting topics of the day. The tariff measure of '32, then caused much agitation, and almost shook the Union to its centre. Some of the Southern states were on the point of resistance to the law creating it. In the conscientious discharge of his duty, Judge Bullard maintained a consistent and decisive course,

and displayed the talent of a learned and firm mind: he strongly advocated a tariff extending protection to manufactures of the United States, and especially that sugar should be so protected, as well as cotton fabrics. And though differing in opinion on this material question from many, he deserved and obtained the respect of all for the able manner in which he supported and enforced his own convictions.

In 1832 he was re-elected to Congress; and while in this Congress, was appointed by Gov. Roman, then Governor of Louisiana, one of the judges of the Supreme Court of this state, to fill the vacancy occasioned by the election of Judge Porter to the Senate of the United States.

Probably no man in our state has ever contributed more to the elucidation of our system of jurisprudence than Judge Porter; the correctness of his decisions was never questioned: indeed, they hav ever been received by our bench and bar with unqualified respect, and referred to with unhesitating confidence—a man whose talents and probity dignified the place which he held, and who received no additional glory from the position. To fill the place of such a man, no ordinary jurist was required; it needed a man of energy, of close application, of extensive information: and accordingly Judge Bullard was appointed in his place on the 4th day of February, 1834. He performed the duties of the office with signal ability, until on the 5th of February, 1839, near the first of the second term of Governor Roman, he was appointed Secretary of State for the State of Louisiana.

It would seem then to have been a matter of some difficulty to get a suitable person to fill the place of Judge Bullard on the Supreme bench. Judge Martin, who had been on the Supreme bench for twenty-four years previously, and was for seven years subsequently, declared that his place could not be filled; and at the warm solicitation of the presiding judge and the bar, he resigned the office of Secretary of State on the 17th December, 1839, and on the same day was re-appointed to the Supreme bench, and continued actively to discharge his high and onerous duties, notwithstanding his physical infirmities, which for many years seriously annoyed him, and which now had much increased. His opinions, delivered from the Supreme bench, are models of judicial eloquence: they display the legal learning of the eminent jurist, and the classic style of the scholar.

He remained on the Supreme bench until, on the remodeling of the judiciary under the present Constitution of our state in the year '46, the old bench was entirely superseded, and a new one formed. Judge Bullard, with his brother judges, now retired to private life. He had not been long in this retirement when he was called upon to pronounce a funeral discourse on the life and character of the venerable Judge Martin. In that discourse, how encouraging a moral he drew from the eventful life of the revered jurist—of the blind old man! Was he conscious how he himself was a living illustration of the truth of his words?

The judge now returned to the practice of the law, at the New-

Orleans bar, and was consulted and employed in many very important and difficult law cases.

In the year 1847 he was appointed professor of the civil law, in the university of this state; but delivered only two courses of lectures. He prepared a course of very able lectures, adapted to his professorship. They were replete with learning and research in the Roman civil law, as modified and practised in Louisiana. He traced the history of our system of jurisprudence through its various branches, up to its fountains in the constitutions of the first kings of Rome, the twelve tables, the Prætorian edicts. The opinions of the learned men, the decrees of the Roman senate, and the laws of the people of Rome; how in its crude, chaotic state, it was codified by Theodosius, and afterwards by Justinian. He pursued this subject as a poet pursues a wild and beautiful idea, repeating with enthusiasm the words of D'Aguesseau, that "the proud destinies of Rome were not yet accomplished. She reigns throughout the world by her reason, after having ceased to reign by her authority."

In 1850 he was elected to fill a vacancy in our state legislature; and in September of the same year, was elected a member of the 31st Congress, to fill the place made vacant by the resignation of C. M. Conrad, who was appointed Secretary of War. Judge Bullard returned to Congress after an absence of sixteen years, and served out the last session; and although weighed down by his physical infirmities, he took an active interest in all the exciting topics and measures which were agitated and acted on during the session. He was seldom out of his place, and voted to the last day and night of the session on all questions and laws which came up. During the session, he also appeared in, and argued several important law cases in the Supreme Court of the United States. He was retained in several more which are not yet tried. Notwithstanding his continuous and active occupations, public and private, Judge Bullard, in connection with Judge Curry, has made a digest of the laws of the state, embracing all the statutes of Louisiana of a general nature, from the territorial legislature in 1805, to that of the state in 1841. It was never completed. A second volume was intended, but at the time it ought to have appeared, a law passed calling a state convention to form a new constitution. As the adoption of this constitution would necessarily change and abrogate many of the most important laws, all idea of publishing a second volume was abandoned. Since then, a "state commission" has been appointed to frame a digest.

Judge Bullard was also an active, and perhaps one of the most efficient members of the Historical Society of Louisiana. This society, formed in 1835, had slept some ten years, until it was awakened by the assiduous exertions of Mr. De Bow,* in 1845, when Judge Bullard was selected to deliver the introductory lecture before it. He was afterwards, on the death of Judge Martin, elected President of the Society, and until his death, on the 17th April, 1851, held

* John Perkins, Esq., did quite as much in this matter as ourselves, and has subsequently done much more. (Ed.)

the place, which has not yet been filled. Indeed, it is much to be regretted, that an institution which might be of so much advantage and glory to the state, should be allowed by our citizens to linger thus, and perhaps entirely to decline.

As a jurist, Judge Bullard was profound, but comprehensive and clear, and the records of his labors are daily pondered over and recited by the members of his profession, in his digest and in the reports of the state. As a politician, he had the confidence of his constituents. As a speaker, he was generally plain and didactic, but always condensed, explicit, and comprehensive; full of deep and practical thought; and his language unexceptionably chaste and classical. And sometimes he would indulge in beautiful and appropriate figures.

As the practical lawyer and stern teacher, he was morose and afflicted, during the last half of his life, by disease, and his manner superficially harsh and even petulant; yet, they who have known him for a long time, and well, and who have had the pleasure of his friendly intimacy, bear testimony that he was not destitute of the kinder and gentler feelings of our nature. His heart, though embittered and seared by circumstances, when touched, vibrated with sweet and mournful sadness. Who does not recognize the music of feeling, when singing the requiem of the gifted Prentiss, the old man said, with tears, and with this we must close his own brief biography:

"Who would have thought that I, whose career is ended—that I, whose sands are fast dropping away—that I, with my age and physical infirmities—I, whose children no longer require a father's solicitude, should have survived to pay this feeble tribute to his memory; while he, the young, the noble-hearted, the gifted—in the fullness of his fame and usefulness—sinks into an early grave? How inscrutable are the ways of Providence!"

ART. VII.—THE STATE OF ALABAMA.*

In the preparation of our series of papers upon the states, which already includes nearly all of the southern and western, we have been deferring *Alabama* until the appearance of the work of Albert J. Pickett, Esq., which we knew to be in preparation, and which has for several years engrossed his almost entire attention. This work being now before the public, the occasion is a fit one to take up the subject, in the discussion of which we shall be greatly aided by the

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* 1. History of Alabama, and Incidentally of Georgia and Mississippi, from the Earliest Period. By Albert James Pickett, of Montgomery. 2 vols. Charleston: Walker and James. 1851. Third edition.
2. Gayarre's History of Louisiana, French and English, 1846 and 1851.
3. The Lily and the Totem, by Wm. Gilmore Simms, of South Carolina. 1851.
4. History of South Carolina, by the same.

possession of a large amount of material which has been for some time accumulating upon our hands.

There are no men in the country who deserve such high and distinguished praise for the zeal, energy, and enthusiasm, which have characterized their labors in gathering together, and embodying in the most attractive forms, the scattering legends, and almost inaccessible historical data locked up in musty folios, relating to the settlement and early development of the southern and southwestern states, as Wm. Gilmore Simms, of South Carolina, Charles Gayarre, of Louisiana, and Col. Pickett, of Alabama. These gentlemen have rescued southern literature from the charge of degrading subserviency and dependence upon that of other regions, and demonstrated that, whilst we have been looking abroad for the records of lofty daring, chivalrous adventure, heroic and terrible struggles with man and with nature, in the most untoward and trying of all possible positions; and more than all, for the true poetry and romance of actual history, on the soil of the South, and under our very eyes, yet long forgotten or neglected, exist the materials of attractive and almost inexhaustible literature! And it is not claiming too much for these gentlemen to say, that they have demonstrated the capacity of southern intellect to cull and combine these materials, and present them in a manner which would do honor to the authorship of any portion of the Union.

It is not claimed for Mr. Pickett that he is a practised writer, weaving the flowers of rhetoric on the rigid canons of the masters of the art, or handling the argumentative portions of his work with the dialectical skill and logical subtilty of writers who have made literature and authorship the study and occupation of a life-time. His work seems rather to be what he tells us he intended it, one in which the mere completeness and elaboration of picture are made subservient to the demands of truthful and minute narrative. In the treatment of his subjects, he has aimed only at simplicity of style, fullness of detail, perspicuity, and, as far as possible, the most entire accuracy in every particular. If he has erred at any point, the pains and the labor to be correct have never been stinted; and he well appeals to the people of the Southwest to reciprocate these labors by a generous reception of the work.

In treating of Alabama, the work of Mr. Pickett will be a prominent text, and we shall introduce many passages from it, in which the author has happily embodied the striking events in the lives of the early explorers, the manners, customs and habits of the aboriginal inhabitants, and of those who subsequently dispossessed them, and constitute the progenitors of the present race that occupy and rule the state.

The materials for Col. Pickett's history were collected by him from many sources. His father removed to Alabama in 1818, the son being but eight years of age. The Creek Indians inhabited the neighborhood of his residence, forming the playmates of his childhood, and for twenty years afterwards his acquaintances, when visit-

ing in their nation. He was also thrown into the company of many old white men, called Indian countrymen, who had conducted commerce among these people in some cases as far back as the revolutionary war. Many of them had intermarried with the Indians. From interviews with such, he collected the most interesting traditions. He "conversed with the chiefs under the shades of the spreading mulberry and walnut upon the banks of the beautiful Tallapoosa." For the later periods, the memories of the elder inhabitants are taxed, who were in some instances visited after journeys of several hundred miles. The statements of the Creek general, McGillivray, and the manuscripts of the half-breed, Stiggins; the contributions of Garcellaso, Biedma, and the gentleman of Elvas; the work of Theodore Irving, and the sketches of Alexander Meek, Le Moyne's Florida, Milford's History of the Creeks, the manuscripts of Claiborne, the volumes of Martin, Monette, Gayarre, public and official documents, newspapers, &c., are all made to contribute their quota towards the completion of this most interesting and instructive narrative.

The thrilling and romantic, yet terribly fatal adventures of De Soto, introduced the European for the first time to the wilds of Alabama. After a long and disastrous march through Florida and Alabama, the once splendid cavalcade of this heroic yet fatal chieftain arrived by the waters of the beautiful Coosa. The far-famed province of this name extended over three hundred miles, and embraced the present counties of Cherokee, Benton, Talladega and Coosa. The chief of Coosa met the warrior riding in a chair, supported upon the backs of several of his people in great state, and extended to him the hospitalities of the town. He even invited the Spaniards to settle in the country, professing a friendship which covered and concealed the most deadly and implacable hostility. From Coosa the expedition advanced towards the Tallapoosa, and eventually to the town of Tallasse. Crossing the Tallapoosa, it advanced towards the residence of the chief, Tuscaloosa, whose son had been dispatched to invite De Soto into his extensive dominions. The haughty chief received the Spaniards without the least expression of admiration or surprise, though with apparent cordiality. His speech was a model of laconic eloquence, and the interview is supposed to have taken place in the present county of Montgomery. The expedition reached soon after the banks of the Alabama, where a fatal disease broke out in the camp, which is said to have been avoided by those who used in their food the ashes of a weed recommended by the Indians. The Mobilian chief was retained in a condition of semi-captivity, but found means with his leading men to plot the destruction of the party of De Soto, which had reached his capital, *Maubilia*. (Mr. Pickett supposes it to have been on the north bank of the Alabama, at a place now called Choctaw Bluffs, about twenty-five miles above the confluence of the Alabama and the Tombigby.) The description of this town is interesting.

"It stood by the side of a large river, upon a beautiful plain; and consisted of eighty handsome houses, each capacious enough to contain a thou-

sand men. They all fronted a large public square. They were encompassed by a high wall, made of immense trunks of trees, set deep in the ground and close together, strengthened with cross-timbers, and with large vines. A thick mud plaster, resembling handsome masonry, concealed the wood work; while port holes were abundant, together with towers capable of containing eight men each, at the distance of fifty paces apart. The eastern and western gate opened into the town."

At this place the savages openly threw off the mask, and precipitated themselves upon De Soto, in one of the most terrible and disastrous battles recorded in the annals of history. Ten thousand Mobilians were in arms, with desperate frenzy, and determined, at one blow, to annihilate the ranks of the insolent invaders of their soil. Prodigies of valor were exhibited upon both sides. The Indians fought in the streets or on the house-tops, and even when hewed down in fearful numbers, uttered no cry for quarter.

"The battle, which now waxed hotter and more sanguinary than ever, cannot be as graphically described as the heroic deeds on either side deserve. Often the Indians drove the troops out of the town, and as often they returned with increased desperation. Near the wall lay a large pool of delicious water, fed by many springs. It was now discolored with blood. Here soldiers fell down to slake the intense thirst created by heat and wounds; and those who were able rose again, and once more pitched into a combat, characterized by the most revolting destruction of human life. For some time the young females joined in the fight, and they now contended, side by side, with the foremost warriors, sharing the indiscriminate slaughter. Heated with excitement, smarting with his wounds, and provoked with the unsubdued fierceness of the natives, De Soto rushed out alone by the gate, threw himself into his saddle, and charged the town; calling, in a loud voice, upon "Our Lady and Santiago," he forced his charger over hundreds of fighting men and women, followed by the brave Wuno Tobar. While opening lanes through the savage ranks, and sprinkling his tracks with blood, he rose, on one occasion, to throw his lance into a gigantic warrior; at that instant a powerful winged arrow went deep into the bottom of his thigh. Unable to extract it or to sit in his saddle, he continued to fight until the end of the battle, standing in his stirrups. Everywhere that mighty son of Spain now gorged upon Alabama blood. His fearless bounds filled the boldest soldiers with renewed courage.

"At length the houses were set on fire; and the wind blew the smoke and flames in all directions, adding horror to the scene. The flames ascended in mighty volume! The sun went down, hiding himself from the awful sight! Manbilia was in ruins, and her inhabitants destroyed!"

In this battle, which lasted nine hours, eighty-two Spaniards were slain, or died afterwards from wounds, and forty-five horses perished, an irreparable loss in their condition. The camp equipage, baggage, clothes, medicine, books, armor, pearls, flour and wine, were consumed in the flames of the burning town. The Mobilians were almost entirely annihilated, their slain being estimated, in one account, at 2,500; and in another, at 11,000. The fate of the chief, Tuscaloosa, is involved in doubt.

De Soto had been expecting the vessels of Maldinado to arrive at Pensacola, and learned at Manbilia that they had actually arrived. Notwithstanding this, and the knowledge of a conspiracy among some of the leaders in the camp, to abandon his fortunes, he came to the sudden and desperate resolution, in the crippled and forlorn con-

dition of his followers, to turn his back upon the shipping, and plunge again into the forests of the north. With daring intrepidity he braved the conspirators, and by the mastery of a will and an intelligence, before which the proudest of them were accustomed to bow, he defeated their schemes, whilst yet only in the bud. Thus is it that great natures rise superior to every fortune, making man and the elements alike, and in defiance of rebellious inclinations, subservient to their bidding. Never was a stronger illustration, than that of the heroic De Soto, after the disasters of Manbilia, and in the dense and almost interminable forests of Alabama!

Crossing the Warrior, and interrupted by daily struggles with powerful parties of savages, the expedition reached the Tombigby, near the county of Lowndes, in the state of Mississippi. The chief of Chickasa met them here, and engaged De Soto to assist him in some of his hostile movements against a neighboring tribe. Quarrels between the Spaniards and the Indians, growing out of the cruelty and oppressions of the former and the cupidity of the latter, soon led to a general outbreak, and an engagement, scarcely less sanguinary and disastrous in its effects than that of Manbilia.

The subsequent fate of De Soto may be briefly told. After the bloody battle of Alabama, which was on the Yazoo River, in the county of Tallahatchie, he crossed the Mississippi, being the first, except, perhaps, De Vaca, to discover its waters—spent a year in wanderings through Arkansas—returning to the Mississippi at the town of Guachaya, below the mouth of the Arkansas River. Here death ended the chapter of his misfortunes, and left to history to emblazon his fame, as one of the bravest captains and most extraordinary adventurers that the world has ever known. He sleeps beneath the waters of that great river, which had never before been disturbed by the voices of civilized man, but which has since ministered to the wants of millions and millions of a race more hardy, energetic and adventurous, than even the Spaniard himself!

"With smiling lips," says Mr. Gayarre, "and serene brow, he cheers his companions, and swears them, one by one, to bear allegiance, in his hands, to Muscoso de Alvarado, whom he designated as his successor. 'Union and perseverance, my friends,' said he, 'as long as the breath of life animates your bodies. Do not falter in the enterprise. Spain expects a richer harvest of glory, and more ample domains from her children.' These are his last words, and then he dies. Blest be the soul of the noble knight, and of the true Christian! Rest his immortal remains in peace within that oaken trunk, scooped by his companions, and by them sunk many fathoms deep in the bed of the Mississippi!"

The aborigines of the Southwest and of Florida are considered by Mr. Pickett as having one common character; and he has furnished several illustrations, taken from the engravings in the work of Le Moyne. They wore mantles of bark and flax interwoven, ornaments of shell, etc., and in their towns were storehouses, filled with garments of hemp, feathers of every hue, deer, panther, martin, and bear skins, packed away in baskets. They strung pearls from the rivers, and shells around their arms, necks and legs. The chiefs

painted their skins in stripes, or punctured with needles and a blackened pigment. Plumes of the eagle feather adorned the head. Their weapons of war, in addition to the bow and arrow, were shields of wood or hides, wooden spears pointed with flint, wooden swords and herculean clubs. The declaration of war was made by sticking arrows in the enemy's roads with locks of hair attached. The chief, surrounded by his men, raised the war cry, which was answered by a thousand voices; he implored victory from the sun, and sprinkled water, in emblem of the enemy's blood, which was soon to flow. The oracular responses of the people were invoked. The wife of a slain warrior might only marry again after her hair, which she had cut off and sprinkled over his grave, had attained its usual length.

In laying out a town, the Indians first erected a mound, on which was placed the house of the chief and his family. At the foot was a square fronted by the residences of the lesser chiefs. The wigwams of the common people came next in order, etc. The houses were of timber, covered with palm, and straw or reeds. In the colder latitudes, they were daubed with clay, and summer and winter residences were provided. The chief's house was in one instance 120 feet by 40, and included small buildings like offices. A remarkable temple was found upon the Savannah River at the present Silver Bluff. The length was 100 and the breadth 40 feet. The walls were proportionately high, and the roof covered with a carpeting of split cane. Beautiful plumes, shells and pearls, were suspended on the inside. The entrance was by three gates, guarded by gigantic and threatening wooden statues, whilst statues of men and women were arrayed around the hill. By the walls were boxes containing the remains of dead chiefs. Chests of valuable pearls, skins, etc., were arranged in the centre, with mantles of feathers, etc. In a storehouse near by was contained copper pikes, bows, arrows, shields, etc., and other implements of warfare.

The Indians planted peas, beans, pumpkins, corn, etc. They made cakes of persimmons, and dug the earth with fish bones, puncturing it with canes for the seed. West of the Mississippi they made fine earthenware and salt. Their canoes were often of the most exquisite workmanship and finish, and were marshalled into fleets. They worshiped the sun, and venerated the moon and certain of the stars, and even the chief, by the cruel sacrifice of the first born male child. The doctor cured his patient by sucking out the blood and spurting it into a bowl from which nursing women were accustomed to drink, if the subject were young and athletic. Sometimes the patient was smoked with tobacco and weeds to produce perspiration.

Should the reader desire to become more familiar with the manners and customs of the southern Indians, and more especially of that extraordinary people, the Natchez, he will find the fullest details in the work of Mr. Gayarre, to which we refer him. The third lecture of the second part of this work is one of the most graphic and eloquent, and deeply interesting contributions to Indian history anywhere

to be met with. Indeed, we have often desired to extract it entire in our pages.

At the time of De Soto, Alabama was inhabited by the Coosas, Tallasses, Mobilians and Choctaws. Being nearly destroyed by his invasion, their places were filled by the Muscogees and Alabamas, who were of Mexican origin, and were driven out of that country by Cortez. Wandering a long time in the wilderness, the Muscogees reached at last and settled upon the banks of the Ohio, almost to the Wabash. They had previously met and vanquished the Alabamas, driving them to the Yazoo, whence they again drove them to the shores of the Alabama, near the confluence of the Coosa and the Tallapoosa. Further pressed by the warlike Muscogees, the unfortunate Alabamas were dispersed a third time, and sought an asylum among the Choctaws and other tribes, whilst the Muscogees overspread Georgia to the banks of the Savannah. Receiving at last into their bosom the relics of the Alabamas, the Tookabatches, the Tuskegees, who were allowed to occupy the forks of the Coosa and the Tallapoosa, the Ozeallies, the Uchees, and fugitives of the Natchez, after the terrible massacre of the French, the Muscogee confederacy increased in strength and power until it became the most formidable in all the country, receiving the name of CREEK, from the number of beautiful rivers and streams meandering through its limits.

The authorities relied upon by Mr. Pickett for this Indian history are the work of Le Clerc Milfort, who long lived among the Creeks, having married the sister of McGillivray, their great chieftain; the work of Hawkins; Adair's History of the Indians; the Notes of Mr. Compere, a Missionary among the Creeks; several old manuscripts and conversations with old settlers and traders. The Big Warrior, in 1822, confirmed the accounts to Mr. Compere: "My ancestors were a mighty people. After they reached the waters of the Alabama, and took possession of the country, they went further—conquered the tribes upon the Chattahoochie, and upon all the rivers from thence to the Savannah—yes, and even whipped the Indians then living in the territory of South Carolina, and wrested much of their country from them."

We have only space to note a few of the peculiarities of the Creeks. Before the consummation of marriage, it was necessary that the husband should have built a house, produced and gathered a crop, made a hunt and brought home game, and tendered the whole to the girl; a good rule, which our civilized race might very well adopt. Divorce was *ad libitum*, and both could marry again, though the woman only after the green corn dance was over. Marriage gave no right over the possessions of the wife, or the children she might have. Adultery was punished with many stripes, whoever was the guilty party, the friends inflicting them, also cutting off the ears, nose, etc., and tearing out the woman's hair. When Bartram visited the nation in 1777, he found fifty towns, containing 11,000 inhabitants, the Muscogee being the national tongue. The general council was always held in the principal town, and was held annually, though

each town had its separate legislative system, like the federal system under which we live. The walls of the public buildings were daubed with rude paintings and sculptures, which were as significant as writing. The green corn dance, a great national festival, is minutely described by Col. Hawkins, whom Mr. Pickett copies at length. The martial arrangements of the Creeks were peculiar. The great chief, on the opening of war, stuck up in public places a partly red stick, and sent to each subordinate as many pieces of sticks as days that must elapse before his presenting himself for service. These latter called up the warriors with the drum, informed them of the rallying place, and the combatants were chosen from those who were the first to arrive, it being some disgrace to arrive too late, to fill up the required number. The warriors then took the "medicine of war," and were supplied by their wives with little bags of parched corn, two ounces being sufficient to make a quart of broth, and satisfy a man for twenty-four hours. This medicine of war was a liquor supposed to possess a virtue in guarding the drinker from all dangers. The "great medicine" secured entire invulnerability, whilst the "little medicine" only diminished the extent of danger. Being purgatives, they may be supposed to have had some slight effect in lessening the danger of wounds. In their marches, each warrior placed his foot in the print of the warrior before him, so as to conceal a knowledge of their numbers, and the last of the party carefully concealed even that print.

Col. Pickett devotes a chapter to the history of the Choctaws, Chickasas and Cherokees. The two former were descended from the Chickemicaws, early emigrants from Mexico, (according to Adair,) who crossed the Mississippi, and inhabited the regions of the Yazoo, the Tombigbee and the Alabama. This account of their origin the Choctaws had lost, believing they had emerged originally from a big hole in a great mound on the road from St. Stephens, in Alabama, to Jackson, Mississippi. The Cherokees were original settlers of Virginia and Carolina, and can be traced no further, having been driven westward by the whites.

Various relics of the aborigines still exist upon the soil of Alabama. The mounds, though attributed by some to an origin anterior to that of the Indians, our author thinks are clearly the work of their hands. It is known positively that the Natchez constructed them as late as 1730. In Alabama they are found upon the Tennessee, Coosa, Tallapoosa, Alabama, Cahaba, Warrior, and Tombigby rivers; and upon being opened, are found to contain bones, stone ornaments, pottery, and sometimes copper and silver ornaments, layers of charcoal, ashes, etc. The practice of erecting a tumulus or mound over the dead has been common to most countries. In some cases, piles of stones were adopted instead, which perhaps accounts for their appearance in many parts of Georgia and Alabama. The ditches which have been discovered at Cahaba, at the falls of Little River, etc., are also thought by Mr. Pickett to be of Indian origin, contrary to the general belief of writers, and intended for purposes of defence. He thinks, at Cahaba there existed an Indian

establishment, fortified with palisades, and that the ditch was cut around them. The ditch at Talladega Springs, which formerly had trees growing in it, surrounds an elevation of many acres, embracing a beautiful gushing spring. At Little River are four or five small caves which have been called "De Soto's Rock Houses," from the fact that they exhibit the marks of intelligent occupation. The walls have been smoothed by the hands of man. We give the language of the author:

"It was doubtless a strong Indian fortification, and long used as a safe retreat when the valleys below were overrun with a victorious enemy. The walls were black with smoke, and everything about them bears evidence of constant occupation for years. These caves, or rock-houses, constituted a most admirable defence, especially with the assistance of the walls at the head of the peninsula. In order to get into the first cave, a person has to psss along a rock passage, wide enough only for one man. Below him, on his right, is the awful precipice, and on his left the rock wall, reaching ten feet above his head. A few persons in the first rock-house with swords and spears could keep off an army of one thousand men; for only one assailant being able to approach at a time, could be easily dispatched and tumbled down the abyss below. In regard to the inner walls of the ditches, the author saw no cement among the rocks, although he had heard that that ingredient (never used by Indians) was to be found there."

The cuttings upon rocks, etc., seen in various parts of Alabama, the author attributes also to the Indians, who used the pieces for the fabrication of pipes, mortars, bowls, etc. These cuttings are especially noticeable near the Tallapoosa River, and Elyton, in the county of Jefferson. We shall not undertake to decide such antiquarian questions, but leave the reader to work them out with the volume of Squier before him, which Mr. Pickett appears to have freely consulted.

We come now to the period when the French began to occupy Alabama. Bienville, who is, in truth, the father of Louisiana, and should have a monument at the mouth of its great river, departed with a force from Dauphin Island, sailed up the bay of Mobile, and at the mouth of Dog River commenced to build a fort, warehouse, and other buildings. This was in 1702, and seventeen years before the founding of New-Orleans! The site of Mobile was, however, removed nine years later to the mouth of the Mobile River, higher up the Alabama, where it now stands.

"The high floods having inundated the settlements around Fort St. Louis de Mobile, Bienville determined to place his people upon more elevated ground. All the inhabitants, except the garrison of the fort, removed upon the Mobile River, where, upon the site of the present beautiful and wealthy commercial emporium of Alabama, they established themselves. Here Bienville built a new wooden fort, which, in a few years, was destroyed, to give place to an extensive fortress of brick, called, in French times, Fort Conde, and in English and Spanish times, Fort Charlotte. The seat of government was permanently fixed here, and the leading characters of the colony made Mobile their head-quarters. Only a small garrison was left at the old settlement at the mouth of Dog River, which, however, continued to guard that point for several years after this period."

The Carolina and Virginia traders began now to penetrate the western wilds, much to the annoyance and jealousy both of the Spanish and French. Upon the backs of packhorses they carried from Charleston stores of goods, "over creeks without bridges, rivers without ferries, and woods pathless and pregnant with many dangers," opening them upon the Coosa and Tallapoosa. To stop these interferences, Bienville fitted out an expedition to locate a fort upon the Alabama. Passing the towns of Selma and Autauga, his boats were moored at the town of Coosawda. The fort was located at Tuskeegee, a most favorable position; and the cannon which guarded it have become a subject of curious history. After remaining in position fifty years, they were spiked and abandoned with the fortress. During the English possession of Alabama, the cannon remained at Fort Toulouse, though the fort was suffered to fall into decay. Some blacksmiths among the Creeks removed the spikes, and the pieces were then used by the Indians for holiday amusements. On the settlement of Montgomery, the inhabitants brought down from Fort Toulouse, then called Jackson, some of these pieces to be used upon festivals, in which service they were in due time burst. A fragment stands now at Pollard's Corner, in Montgomery. One of the cannon still exists at Rockford, and it is thought that the others are in the bed of the river opposite the fort. The reflections which are made by Mr. Pickett upon the labors of Bienville among the savages, we think, detract from, rather than add to, the dignity of the narrative.

Passing over the numerous Indian wars of the colonists, and their contests with the Spaniards, including the whole period of the charter of Crozat and the "Mississippi Company," noticing only the arrival at Mobile, loaded with African slaves, of three French ships of war, (1721,) we arrive at a point when the disasters of the colony forced the abandonment of both Mobile and Biloxi, and produced the most terrible sufferings and mutinies at the post upon the Coosa. We also hurry over the chapter upon the Natchez massacre, which, in common with Mr. Gayarre, the author treats with great clearness and elaboration, adopting almost entirely the letter of Father Petit, published among the letters of the Jesuits, in the work of the Rev. Ingraham Kip, of New-York.

Chapters seven and eight of the history of Alabama treats of the English in Georgia, and of the daring scheme of a Jesuit named Priber, who traveled extensively among the Indians, gaining everywhere their confidence, and who pretended to have in view a confederation of all the southern Indians, for purposes of industry, civilization and freedom from the European yoke. Being arrested, he died in prison at Frederika. Dr. Stevens, in his history of Georgia, describes him as "a thorough Jesuit, an accomplished linguist, a deep tactician, far-sighted in his plans, and far-reaching in his expedients."

Referring to the failure of the French expeditions against the Chickasaws, those early natives of Alabama, Mr. Pickett takes occasion to compliment their gallantry, and to urge upon the rising

generation of the state, an imitation of their example, *in the maintenance of their rights and their liberties.* We give the passage entire, p. 352 :

"The Chickasaws have never been conquered. They could not be defeated by De Soto, with his Spanish army, in 1541; by Bienville, and his French army, and southern Indians, in 1736; by D'Artaguette, with his French army, and northern Indians; by Marquis De Vaudreueil, with his French troops and Choctaws, in 1752; nor by the Creeks, Cherokees, Kickapoos, Shawnees and Choctaws, who continually waged war against them. No! they were the 'bravest of the brave;' and even when they emigrated to the territory of Arkansas, not many years ago, they soon subdued some tribes who attacked them in that quarter.

" Young men of northwestern Alabama and northeastern Mississippi, remember that the bravest race that ever lived, once occupied the country which you now inhabit—once fished in your streams, and chased the elk over your vast plains ! Remember, that whenever that soil which you now tread was pressed by the feet of foes, it was not only bravely defended, but drenched with the blood of the invader. Will you ever disgrace that soil and the memory of its first occupants, by submitting to injustice and oppression, and finally to invasion? We unhesitatingly give the answer for you—No, never !"

The first volume of Mr. Pickett, and here we shall have to divide our subject, to be resumed in the next number, concludes with the delivery of Louisiana and Alabama to the English, under the treaty of 1763, and with some account of the expedition of Bossu into the interior of the country. A single extract furnishes a contrast between Alabama as we find it, and the wilderness out of which it has been so soon created :

"Not only were the Creeks and Alabamas at peace with other nations at this time, but gave evidences of warm and generous hospitality. They thronged the banks of the river, which now meanders along the counties of Autauga, Montgomery, Dallas and Lowndes, and as Bossu slowly made his way up the beautiful stream, greeted him with friendly salutations, offered him provisions, such as bread, roasted turkeys, boiled venison, pancakes baked with nut oil, and deer tongues, together with baskets full of eggs of the fowl and turtle. The Great Spirit had blessed them with a magnificent river, abounding in fish; with delicious and cool fountains gushing out from the foot of the hills; with rich lands, that produced without cultivation, and with vast forests, abounding in game of every description. But now the whole scene is changed. The country is no longer half so beautiful; the waters of Alabama begin to be discolored; the forests have been cut down; steamers have destroyed the finny race; deer bound not over the plain ; the sluggish bear has ceased to roam through the swamps ; the bloody panther does not spring upon his prey ; wolves have ceased to howl upon the hills; birds cannot be seen in the branches of the trees ; graceful warriors guide no longer their canoes, and beautiful squaws loiter not upon the plain, nor pick the delicious berries. Now, vast fields of cotton, noisy steamers, huge rafts of lumber, towns reared for business, disagreeable corporation laws, harassing courts of justice, mills, factories, and everything else that is calculated to destroy the beauty of a country, and to rob man of his quiet and native independence, present themselves to our view.

"The heart yearns to behold once more such a country as Alabama was, the first time we saw it, when a boy. But where can we now go, that we shall not find the busy American, with keen desire to destroy everything which nature has made lovely?"

DEPARTMENT OF AGRICULTURE.

1.—THE HOG BUSINESS OF THE WEST.

We are indebted to the Cincinnati Prices Current and to Mr. Cist's valuable work, entitled "Cincinnati in 1851," for the following statistics of this most important western crop, which will interest our readers everywhere. The figures show that whatever may be the merits of other places in this particular, and we speak it deferentially, the palm, after all, will have to be accorded to Cincinnati, of being, beyond comparison, in that sense only in which it is no discredit, the most *hoggish* place in all the West.

Mr. Cist says, that Cincinnati is the principal pork market in the United States, and without even the exception of Cork and Belfast, the largest in the world. The business dates back 26 years, but has only been important since 1833.

HOGS KILLED IN THE WEST.

	1850-'51.	1849-'50.
Ohio, exclusive of Cincinnati	64,027	152,900
Indiana	329,549	380,174
Kentucky	205,414	201,000
Cumberland Valley	30,000	40,000
Cincinnati	310,000	401,735
	938,990	1,175,809
		938,990
		236,819
Deduct 10 per cent. for light weight		93,899
Total deficiency		142,920

COMPARISON OF THE NUMBER OF HOGS DRIVEN SOUTH FROM KENTUCKY AND TENNESSEE.

	1849-'50.	1850-'51.
Through Cumberland Gap	43,000	21,000
Through Asheville, N. C., embracing Tennessee hogs	81,000	40,000
	124,000	61,000
	61,000	
Deficiency	63,000	
To which add deficiency in weight	6,300	
Total	69,300 hogs.	

PACKING OF LOWER KENTUCKY AND TENNESSEE AND KENTUCKY RIVER.

	1849-'50.	1850-'51.
Bowling Green and vicinity	15,000	9,000
Clarksville	15,000	6,000
Canton	5,271	1,700
Nashville, Tenn	13,476	5,382
Gallatin, Tenn	6,800	895
Woodsonville, Ky	4,000	1,000
Owensboro, Ky	3,500	none.
Brandenburgh	2,100	600
Rock Haven	5,300	1,300
Salt River, in flatboats	6,000	1,200
On Kentucky River	15,000	7,000
	91,447	34,077
	34,077	
Deficiency	57,370	
To which add deficient weight of fully 22 lbs. per hog, equal to (hogs)	3,950	
Total deficiency	61,320 hogs.	

RECAPITULATION.

Deficiency in hogs driven	69,300
Deficiency in hogs packed in Lower Kentucky, Tennessee, and on Tennessee River	61,320
Deficiency in weight around the falls equal to	1,180
Total deficiency in hogs	131,800
Deficiency in barrels of pork around the falls	1,705
Deficiency in pounds of lard around the falls	519,227
Equal in barrels to	2,360

PORK PACKING IN KENTUCKY AND TENNESSEE.

The Louisville Courier of the 23d instant says: We subjoin the following statistics in regard to the product of the hog, which have been accurately and carefully compiled from authentic sources, and will prove serviceable to the mercantile community. It gives the exact number of hogs slaughtered around Louisville for the last two years; also, the actual weight of hogs, the weight of lard, and the quantities of pork made; together with the deficiencies and gains, here and elsewhere. The list embraces full returns from Kentucky, Tennessee, and the hogs driven South, and shows a total deficiency of 131,800 hogs this season. This table will be valuable for future references:

PACKERS. 1849-50.	Hogs Slaughter'd.	Aggregate Weight, (lbs.)	Aggregate Weight of Lard.	No. of bbls. Pork.
Adams & Co.	41,545	8,852,398	1,732,210	19,755
A. S. White & Co	34,017	6,494,040	1,360,680	12,984
Huffman, Maxcy & Co.	30,363	5,772,288	775,919	10,863
M. D. Walker	35,600	6,831,000	1,479,213	13,820
McDonald & Day	11,000	2,068,000	352,000	2,815
Clifton, Atkinson & Co.	26,580	5,200,000	625,000	8,200
R. Ernst	none		495,000	none
Bailey	none	1,225,000	154,000	none
Total	179,105	36,442,726	6,974,022	68,437
1850-'51.				
Jackson, Owsley & Co.	41,752	8,056,015	1,484,236	14,439
A. S. White & Co	31,773	5,535,900	1,048,409	10,952
Huffman, Maxcy & Co.	24,600	4,568,238	586,986	8,757
W. Jarvis & Co	25,691	4,878,349	975,179	9,102
Brannin, Bacon & Co.	27,550	5,219,760	927,669	9,541
Clifton, Atkinson & Co.	25,178	4,657,950	553,816	8,360
McDonald & Day	13,370	2,366,490	361,000	3,681
Key & Garner	5,500	962,500	147,500	1,900
R. Ernst	none		370,000	none
Total	195,414	36,245,182	6,454,795	66,732

We extract the following entire from Mr. Cist's work:

HOG BUSINESS OF CINCINNATI.

Year.	No. of Hogs.	Year.	No. of Hogs.	Year.	No. of Hogs.
1833	85,000	1840	95,000	1847	250,000
1834	123,000	1841	160,000	1848	498,160
1835	162,000	1842	220,000	1849	310,000
1836	123,000	1843	250,000	1850	401,755
1837	103,000	1844	240,000	1851	324,529
1838	182,000	1845	213,000		
1839	199,000	1846	287,000		

Year.	Hogs packed in Ohio.	Per cent. in Cin'ti.	Year.	Hogs packed in Ohio.	Per cent. in Cin'ti.
1844	560,000	43	1848	742,212	66
1845	450,000	47	1849	600,316	71
1846	425,000	68	1850	563,645	80
1847	325,000	70	1851	388,556	80

"The hogs raised for this market, are generally a cross of *Irish, Grazier, Byfield, Berkshire, Russia, and China*, in such proportions as to unite the qualifications of size, tendency to fat, and beauty of shape to the hams.

"The slaughter houses of Cincinnati are in the outskirts of the city, are ten in number, and fifty by one hundred and thirty feet each in extent, the frames being boarded up with moveable lattice-work at the sides, which is kept open to admit air, in the ordinary temperature, but is shut up during the intense cold, which occasionally attends the packing season, so that hogs shall not be frozen so stiff that they cannot be cut up to advantage. These establishments employ, each, as high as one hundred hands, selected for this business, which requires a degree of strength and activity that always commands high wages.

"The slaughterers formerly got the gut fat for the whole of the labor thus described, wagoning the hogs more than a mile to the pork houses, free of expense to the owners. Every year, however, enhances the value of the perquisites, such as the fat, heart, liver, &c., for food; and the hoofs, hair, and other parts for manufacturing purposes. For the last two years, from ten to twenty-five cents per hog have been paid as a bonus for the privilege of killing.

"The hauling of hogs from the slaughter house to the packers, is itself a large business, employing full fifty of the largest class of wagons, each loading from sixty to one hundred and ten hogs at a load.

"The hogs are taken into the pork houses from the wagons and piled up in rows as high as possible. These piles are generally close to the scales. Another set of hands carry them to the scales, where they are usually weighed singly, for the advantage of the draught. They are taken hence to the blocks, where the head and feet are first struck off, no blow needing its repetition. The hog is then cloven into three parts, separating the ham and shoulder ends from the middle. These are again divided into single hams, shoulders and sides. The leaf lard is then torn out, and every piece distributed with the exactness and regularity of machinery, to its appropriate pile. The tender-loins, usually two pounds to the hog, after affording supplies to families, who consume probably one-half of the product, are sold to the manufacturers of sausages.

"The hog, thus cut up into shoulders, hams and middlings, undergoes further trimming to get the first two articles in proper shape. The size of the hams and shoulders varies with their appropriate markets, and with the price of lard, which, when high, tempts the pork packer to trim very close, and, indeed, to render the entire shoulder into lard. If the pork is intended to be shipped off in bulk, or for the smoke house, it is piled up in vast masses, covered with fine salt in the proportion of fifty pounds of salt to two hundred pounds weight of meat. If otherwise, the meat is packed away in barrels with coarse and fine salt in due proportions—no more of the latter being employed than the meat will require for immediate absorption, and the coarse salt remaining in the barrel to renew the pickle, whose strength is withdrawn by the meat, in process of time.

"The different classes of cured pork, packed in barrels, are made up of the different sizes and conditions of hogs—the finest and fattest making clear and mess pork, while the residue is put up into prime pork or bacon. The inspection laws require that clear pork shall be put up of the sides, with the ribs out. It takes the largest class of hogs to receive this brand. Mess pork—all sides, with two rumps to the barrel. For prime—pork of lighter weight will suffice. Two shoulders, two jowls, and sides enough to fill the barrel, make the contents. Two hundred pounds of meat is required by the inspector, but one hundred and ninety-six pounds, packed here, it is ascertained, will weigh out more than the former quantity in the eastern or southern markets.

"The mess pork is used for the commercial marine, and the United States navy. This last class, again, is put up somewhat differently, by specifications

made out for the purpose. The prime is packed for ship use and the southern markets. The clear pork goes out to the cod and mackerel fisheries. The New Englanders, in the line of pickled pork, buy nothing short of the best.

"Bulk pork is that which is intended for immediate use or for smoking. The former class is sent off in flatboats for the lower Mississippi. It forms no important element of the whole, the great mass being sent into the smoke-houses, each of which will cure a hundred and seventy-five thousand to five hundred thousand pounds at a time. Here the bacon, as far as possible, is kept until it is actually wanted for shipment, when it is packed in hogsheads containing from eight hundred to nine hundred pounds, the hams, sides, and shoulders put up each by themselves. The bacon is sold to the iron manufacturing regions of Pennsylvania, Kentucky, and Ohio—to the fisheries of Pennsylvania, Maryland, and Virginia, and to the coast or Mississippi region above New-Orleans. Large quantities are disposed of, also, for the consumption of the Atlantic cities. Flatboats leave here about the first of July, and they all take down more or less bacon for the coast trade.

"Of five hundred thousand hogs cut up here during that season, the product, in the manufactured article, will be :

Barrels of pork	180,000
Pounds of bacon	25,000,000
" lard	16,500,000

"These are the products, thus far, of the pork houses' operations alone That is to say, the articles thus referred to, are put up in these establishments, from the hams, shoulders, sides, leaf lard, and a small portion of the jowls—the residue of the carcasses, which are taken to the pork-houses, being left to enter elsewhere into other departments of manufacture. The relative proportions, in weight of bacon and lard, rest upon contingencies. An unexpected demand and advance in price of lard would greatly reduce the disparity, if not invert the proportion of these two articles. A change in the prospects of the value of pickled pork, during the progress of packing, would also reduce or increase the proportion of barreled pork to the bacon and lard.

"The lard made here is exported in packages for the Havana market, where, besides being extensively used, as in the United States, for cooking, it answers the purpose to which butter is applied in this country. It is shipped to the Atlantic markets, also, for local use, as well as for export to England and France, either in the shape it leaves this market, or in lard oil ; large quantities of which are manufactured at the east.

"There is one establishment here, which, beside putting up hams, &c., extensively, is engaged in extracting the grease from the rest of the hog. Its operations have reached, in one season, as high as thirty-six thousand hogs. It has seven large circular tanks—six of capacity to hold each fifteen thousand pounds, and one to hold six thousand pounds—all gross. These receive the entire carcass, with the exception of the hams, and the mass is subjected to steam process, under a pressure of seventy pounds to the square inch ; the effect of which operation is to reduce the whole to one consistence, and every bone to powder. The fat is drawn off by cocks, and the residuum, a mere earthy substance, as far as made use of, is taken away for manure. Beside the hogs which reach this factory in entire carcasses, the great mass of heads, ribs, back-bones, feet, and other trimmings of the hog, cut up at different pork-houses, are subjected to the same process, in order to extract every particle of grease. This concern alone turned out, the season referred to, three millions six hundred thousand pounds lard, five-sixths of which was No. 1. Nothing can surpass the purity and beauty of this lard, which is refined as well as made under steam processes. Six hundred hogs per day pass through these tanks, one day with another.

"We follow now to the manufacture of lard oil, which is accomplished by divesting the lard of one its constituent parts—stearine. There are probably thirty lard oil factories here, on a scale of more or less importance. The largest of these, whose operations are probably more extensive than any other

in the United States, has manufactured, heretofore, into lard oil and stearine, one hundred and forty thousand pounds monthly, all the year round.

"Eleven million pounds of lard were run into lard oil that year, two-sevenths of which aggregate made stearine; the residue, lard oil, or in other words, twenty-four thousand barrels of lard oil, of forty to forty-two gallons each. The oil is exported to the Atlantic cities and foreign countries. Much the larger share of this, is of inferior lard, made of mast-fed and still-fed hogs, and the material, to a great extent, comes from a distance, making no part of these tables. Lard oil, beside being sold for what it actually is, enters largely, in the eastern cities, into the adulteration of sperm oil; and in France, serves to reduce the cost of olive oil. The skill of the French chemists enables them to incorporate from sixty-five to seventy per cent. of lard oil with that of the olive. The presence of lard oil can be detected, however, by a deposit of stearine; small portions of which always remain with that article, and may be found at the bottom of the bottle.

"We now come to the star candles, made of the stearine expressed from the lard in manufactnre of lard oil. The stearine is subjected to hydraulic pressure, by which three-eighths of it is discharged as an impure olein. This last is employed in the manufacture of soap. Three million pounds of stearine, at least, have been made, in one year, into star candles and soap in these factories, and they are prepared to manufacture thirty thousand pounds star candles per day. The manufacture of 1847–48, embracing stearine from foreign lard, probably reached one-half that quantity.

"From the slaughterers, the offal capable of producing grease, goes to another description of grease extractors; where are also taken hogs dying of disease or by accident, and meat that is spoiling through unfavorable weather or want of care. The grease tried out here, enters into the soap manufacture. Lard grease is computed to form eighty per cent. of all the fat used in the making of soap. Of the ordinary soap one hundred thousand pounds are made weekly, equal, at four cents per pound, to two hunded thousand dollars per annum. This is exclusive of the finer soaps, and of soft soap, which are probably worth twenty-five per cent. more.

"Glue, to an inconsiderable amount, is made of the hoofs of the hogs.

"At the rear of these operations, comes bristle dressing for the Atlantic markets. This business employs one hundred hands, and affords a product of fifty-five thousand dollars.

"Last of all is the disposition of what cannot be used for other purposes, the hair, hoofs, and other offal. These are employed in the manufacture of prussiate of potash, to the product of which, also, contributes the cracklings or residuum left, on expressing the lard. The prussiate of potash is used extensively in the print factories of New-England, for coloring purposes. The blood of the hog is manufactured into Prussian blue.

"A brief recapitulation of the various manufactures out of the hog, at this point and date, present:

Barrels pork	180,000	Pounds star candles	2,500,000
Pounds bacon	25,000,000	" bar soap	6,200,000
" No. 1 lard	16,500,000	" Fancy soap, etc	3,800,000
Gallons lard oil	1,200,000	Prussiate of potash	60,000

"Five hundred thousand hogs exhibit, including seven pounds of gut-fat to each, one hundred millions pounds, carcass weight, when dressed. This is distributed thus:

180,000 bbls. pork, 196 lbs. net, is	35,280,000
Bacon	25,000,000
No. 1, or leaf lard	16,260,000
Commmon lard or grease for oil, stearine and olein	6,000,000
Inferior grease for soap	1,200,000
Evaporation, shrinkage, waste, cracklings and offal for manure	16,260,000
	100,000,000

"The value of all this depends, of course, on the foreign demand. In 1847 the pork, bacon, lard, lard oil, star candles, soap, bristles, &c., exceeded six millions of dollars in value. For 1848, it had, probably, reached eight millions. But for the reduced prices which a greatly increased product always creates, it must far exceed that value.

"The buildings in which the pork is put up, are of great extent and capacity, and in every part thoroughly arranged for the business. They generally extend from street to street, so as to enable one set of operations to be carried on without interfering with another. There are thirty-six of these establishments, beside a number of minor importance.

"The following are specimens of hogs and lots of hogs, killed in Cincinnati, this season and the last.

Hogs.	Average weight. lbs.	Hogs.	Average weight. lbs.
7	722	52	377
5	640	50	375
22	403		

Of these were nine—one litter—weighing respectively, 316, 444, 454, 452, 456, 516, 526, 532.

320 hogs	325
657 "	305

"Few, if any of these hogs, were over nineteen months old. The last lot is extraordinary—combining quantity and weight—even for the West. They were all raised in one neighborhood in Madison county, Kentucky, by Messrs. Caldwell, Campbell, Ross, and Gentry, the oldest being nineteen months in age.

"The value of these manufacturing operations to Cincinnati, consists in the vast amount of labor they require and create, and the circumstance that the great mass of that labor furnishes employment to thousands, at precisely the very season when their regular avocations cannot be pursued. Thus, there are, perhaps, fifteen hundred coopers engaged in and outside of the city, making lard kegs, pork barrels, and bacon hogsheads: the city coopers, at a period when they are not needed on stock barrels and other cooperage, and the country coopers, whose main occupation is farming, during a season when the farms require no labor at their hands. Then there is another large body of hands, also agriculturists, at the proper season, engaged getting out staves and heading, and cutting hoop-poles, for the same business. Vast quantities of boxes of various descriptions, are made for packing bacon, for the Havana and European markets. Lard is also packed to a great extent, for export in tin cases or boxes, the making of which furnishes extensive occupation to the tin-plate workers.

"If we take into view, farther, that the slaughtering, the wagoning, the pork-house labor, the rendering grease and lard oil, the stearine and soap factories, bristle dressing, and other kindred employments, supply abundant occupation to men, who, in the spring, are engaged in the manufacture and hauling of bricks, quarrying and hauling stone, cellar digging and walling, bricklaying, plastering, and street paving, with other employments, which, in their very nature, cease on the approach of winter, we can readily appreciate the importance of a business, which supplies labor to the industry of, probably, ten thousand individuals, who, but for its existence, would be earning little or nothing, one-third of the year.

"The last United States census gave 26,301,293, as the existing number of hogs at that date. The principal increase since, is in the West, owing to the abundance of corn there; and that quantity may be now safely enlarged to forty-five millions. This is about the number assigned to entire Europe, in 1839, by McGregor, in his Commercial Dictionary; and there is probably no material increase there since, judging by the slow advance in that section of the world, in productions of any kind.

"The number of hogs cut up in the valley of the Mississippi, will reach, for recent years, as an average, one million seven hundred thousand; of this, it will be seen, that twenty-eight per cent., or over one-fourth of the whole quantity, is put up for market in Cincinnati alone."

2.—COTTON PLANTERS' REMEDY FOR LOW PRICES.

A correspondent of the Arkansas Shield has favored us with his contribution to that paper, in which he recommends a Cotton Planters' Convention at New-Orleans to diminish the production of cotton by a compact and by subordinate state and county associations. We are afraid the thing is impracticable, and hesitate even to endorse to the full extent the plan of the Macon Convention, published in our November number. That the planters are at the mercy of the buyers is clear, and regarding it an unnatural state of things, we are inclined to the opinion there is a remedy somewhere—but where that remedy lies, is the rub. Will not our intelligent planters make use of the Review, which circulates so extensively among them, in the elucidation of the problem? An extract is all we can give at present from the writer in the Shield, remarking that there are other applications of slave labor, as in factories and in building rail-roads, which would afford still further relief:

"The benefits arising from this system or policy are of a magnitude that will not be perceived without reflection. What are they? Suppose we say that ten acres of cotton to the hand is the average; every cotton planter knows what it takes to cultivate ten acres of cotton. It is a press, a *drive*, from the 1st of January to the 1st of January next. But instead of ten, let him plant six acres to the hand; fewer agricultural implements and less mule team will answer his purpose. This of itself is a saving. He economizes four months of his labor, which he can devote to raising his stock, manufacturing his negro clothing, and the general improvement of his plantation. His yard, garden, &c., could be enriched and ornamented. In a word, his plantation could be made a desirable home, with all the conveniences that home ought to possess; could be made to charm and hold him, instead of the dilapidated, desolate and anti-home appearance of Southern plantations under the present system of planting all you can cultivate. But to the figures. Fancy sketches of pretty yards, etc., won't influence a planter; but convince him that you will put money in his pocket, and he adopts your plan.

COST OF CULTIVATING 100 ACRES.

5 Mules, worth	$500
15 Ploughs and Scrapers	75
5 set gear	15
Feed for five mules	250
	840
Four months' labor for ten hands, which is saved by cultivating only 60 acres, at $20	800
	$1,640

COST OF CULTIVATING 60 ACRES.

3 Mules, worth	$300
10 Ploughs and Scrapers	50
3 set gear	9
Feed for 3 mules	150
	$509

"Suppose the value of the product the same, and I am certain the value of the 60 would be 20 per cent. more than that of the 100 acres under the general system, and you have $1,131 in favor of the 60 acres, or $113 to the hand; this of itself would be a good profit.

"I propose that a Convention of Cotton Planters be held in New-Orleans on the 1st of January next, to organize a plan to reduce the cultivation of cotton, that being our only remedy for ruinous low prices. Let every county in the South send a delegate to this Convention, and let them determine on the maximum number of acres that shall be planted to the hand, and then get the pledge of every member that he will get the voluntary obligation of every planter in his county not to plant more than the number of acres agreed on. This is practicable

and could be effected; one half the labor that it takes to carry a sheriff's election would do the work. When the delegate gets home, he could appoint assistants in each civil district or township. But would the planters sign such a pledge and stick to it after signing? I say they would. An isolated case of a mean, groveling one, might be found to violate the pledge after signing; let him be marked with the infamy he deserves; cut him off from all fellowship with his craft, and mark his children as the progeny of a man who would not keep his faith.

"State Conventions might be formed tributary to the General Convention; and even county Conventions, tributary to the state; and a perfect organized system be made to reach every planter in the South, and effect the object contemplated. Let the General Convention meet annually, at some one of the southern sea-ports, or wherever the previous Convention might elect, and each year determine the number of acres to be planted the next year. Perhaps an increase in the planting may be demanded, or it may be necessary to order a decrease in the number of acres; and in this way the quantum necessary for a healthy supply could be regulated.

"Is it practicable? The first question is, is it necessary? When our forefathers determined the necessity of revolution and separation from the mother country, they did not stop to inquire into its practicability. They revolutionized, and separated, and established our glorious confederacy; and at this time the cotton planters are pecuniarily more tributary to England than our forefathers were politically. Shall we revolutionize and make the moneyed power of Europe tributary to us, or shall we remain its vassals, subject to its mercy?

"Cotton planters, think of my plan; and if it will do, let's go to work and carry it out; and if it won't do, in the name of our southern country, propose a remedy that will do." M.

3.—SUGAR MAKING.

Dr. Shier, agricultural chemist to the colony of British Guiana, has discovered a method of extracting an extra quantity of sugar from the juice of the cane by substituting subsidence and filtration for skimming, in the clarification of the juice. By this means he obtains nearly 20 per cent. more than by the ordinary process, and the juice yields from 1 lb. 4 oz. to 1lb. 10 oz. of muscovado per gallon.

4.—THE LARGEST CROP OF COTTON EVER YET ANNOUNCED.

The following extraordinary statement has been made to us by Col. Quarles, on whose authority we give it to the public. Mr. D. W. Quarles, son of Col. Quarles, whose plantation is on Oyster Creek, in Brazoria County, has made this season four hundred bales of cotton on one hundred and sixty acres of land, and with twelve hands! About three hundred bales of this cotton have already been picked, but the picking is still going on, and when completed, the amount will not be less than four hundred bales. It is not pretended that the whole of this has been picked out by the same twelve hands, for during the picking season Mr. Quarles employed a large number of hands to assist him, whose labor will cost a hundred or more bales, so that the nett proceeds of the twelve hands will be two hundred and seventy-five, or perhaps three hundred bales. The whole of this cotton was planted and cultivated by the said twelve hands, and the only help they had was in the picking. To prevent any misunderstanding of this statement, we are authorized to say, that the bales are of the average weight of those usually made in Texas, that is, about 500 lbs. each.

In addition to the above we have authority to say, that the same twelve hands have raised and gathered, during the season, 2,300 bushels of corn from thirty acres of land, which is considerably below the yield of corn last year, on the same plantation. It may be of some interest here to state, that the above crops of cotton and corn were both planted in February, which Col. Quarles thinks is the month in which both cotton and corn should always be planted in Texas. The picking of the cotton was commenced on the 4th of July last.

If, after paying for the extra labor required to pick the above crop, there shall remain 275 bales, which is the smallest named; then the nett proceeds of the twelve hands will be within a small fraction of 23 bales each, to which we must

add 191 bushels of corn, to make the total product of each hand's labor; and this, at the present prices of cotton and corn, cannot fall much, if any, short of one thousand dollars to the hand.

Should our readers wish confirmation of the above statement, we are authorized to give the names of Messrs. Williams, Gass, Compton, Lobdell and Love, who own and cultivate adjoining plantations, and will bear testimony to its correctness. The land which produced this crop is of the usual quality of Oyster Creek lands, and, indeed, of the bottom lands of Texas generally, of which any one may be readily convinced by his own observation!—*Galveston (Texas) News.*

5.—IMPROVEMENT OF COTTON.

The following interesting letter from Col. H. W. Vick, of Vicksburg, appears in the Southern Cultivator. It is upon a subject of the utmost importance to the growers of cotton. It is not the first able communication we have seen from the pen of Col. Vick, though it is to be regretted that planters who are able to give to their fellow-planters such clear and satisfactory accounts of the results of their experience, should so rarely take pen in hand.

The letters were originally addressed to Dr. Phillips, of Hinds county, Miss. These are the principal facts stated:

Seventeen years since, I procured from the Petit Gulf-hills some excellent cotton seed, known then, as now, as the little brown, or drab Petit Gulf Mexican. For the first seven years, ordinary care was taken of them; when, having met with none superior, I set the resolution to improve them if I could.

I first had a few bushels of seed culled from the bulk, of uniform appearance, and of the description supposed best, This was done for two years. The seed were purified, as it is termed, but the benefit to the crop was barely perceptible. I have since found that this method can be practised with advantage, but only under circumstances hereafter to be named.

I next sent three men ahead of the other hands, assigning four rows to each, with orders to pick the best bolls from the best stalks only. I was so much pleased with the result, that I practised this method for five years, under the impression that it was the best that could be devised. But it was not.

The summer and fall of 1843 I spent on my cane-hills plantation, seven miles from Vicksburg. While superintending personally, as I had previously done, the three men mentioned picked a few of the largest and most beautiful bolls from the extra fine stalks, which I kept apart in my pockets, hat, handkerchief, and in every way I could, and papered up under notes and memorandums, for future examination. To this method I am indebted for anything I know respecting cotton known to every one.

Of the First Method.—Little is accomplished by picking a large or even considerable quantity of seed from a large bulk. For an amount of experience and judgment is required to do this with discrimination, that will never be possessed by any negro, rarely by any overseer, and but seldom by any planter. But the seed from a single stalk may safely be trusted to a negro, or overseer, by whom the mixed seed, if any, may be separated, papered apart, and tied up with those proper to the stalk. This, however, with the best stalks, should, whenever convenient, be attended to by the planter himself, as well for study as satisfaction and profit.

Of Second Method.—For a field of 50 hands, 400 to 500 lbs. of cotton should annually be culled. If this were done, the size and opening of boll, size, health and production of stalk, picking properties, quantity, and quality of lint, would all be advanced.

Of Third Method.—In favor of this method, on which the gardener, orchardist, &c., mainly depends, which is as old as the practice, and older than the science of agriculture, too much cannot be said.

6.—INTRODUCTION OF FOREIGN VEGETABLES AND ANIMALS.

Among the two or three hundred thousand vegetables and animals that God has created to satisfy our natural and artificial wants, there are very few that we

have yet acclimated or domesticated, or know how to employ. However few they may be, we continue to increase them, and our power to make acquisitions would appear to have no limits but those of creation. A considerable number of the plants which grow among us have been brought very recently from climates quite different from ours. It will be useful to notice this fact.

Thus, Asia has given us hemp, the cherry, the peach, the French bean, the tarragon, the onion, rhubarb, mint, the mulberry, the citron, the lime, the orange, the chestnut, the pine of Siberia, the pine of Jerusalem, the plane tree of the East, the aloe, the rose of Provence, the mallow rose, the millet, the cypress, and so forth. Grain and buckwheat we got from the Levant, and the olive from Africa.

Europe has borrowed from America the potato, the maize, the tobacco, the banana, the love-apple, the strawberry, the medlar tree, and a hundred other trees, fruits, plants and flowers.

Within three or four centuries, Europe and America have been literally invaded with vegetables from all parts of the globe. We live almost entirely upon what has been borrowed from other countries; and it is but the advance guard of the immense quantity and variety which science, and the rapid intercommunication between the different parts of the world, will give us. We are at liberty to choose from the general herbal of creation all that suits us.

I cannot give an inventory of all the riches that we can appropriate. It would almost be an endless labor to give such a catalogue of creation. I will but glance at a few among the alimentary plants—the *artocarpe*, (so precious to the inhabitants of Tahiti,) the *sagotier*, the palm-cabbage, the bamboo of Celebes, (of which the young sprouts have a delicious flavor,) the cocoa tree, (of which the fruit is both meat and drink,) the gum tree, the bread fruit, the sugar palm, the plantain and banana, the tamarind, the *papayer*, the mangosteen, &c. Among the textile plants I might mention a great variety; but I will notice only the New Zealand flax, and the abaca, (*artica utilis*)—a kind of flax in the Philipine Islands and China, of which the Chinese make the most superb stuffs. Of the trees for cabinet-making, for building, and for the masts of vessels, a thousand might be taken from the pines, the cedars, the ebony, the sandal, and the satin wood. Then there are the trees which yield us gums, rosin, tinctures, and medicines; the spice and tea trees; and a number of others not so useful, perhaps, but which would delight us with their beauty and fragrance.

To speak of the animal kingdom: how many more kinds might we domesticate than we have? Mr. Jeffroy St. Hilaire cites several in his memoir upon the utility of a menagerie of acclimation—those great antelopes, which would furnish an abundance of healthy food; the Peruvian sheep, of which the wool is so fine and soft; the tapir, larger than the pig, and as easy to feed, the flesh of which is very agreeable and wholesome, and which might be made useful as a beast of burden; the lama, the alpaca, and a number of others.

And thus, among birds, if we direct our attention to the subject, we shall discover many other kinds worth introducing or domesticating for their flesh, their eggs, or their beauty.

With respect to fish, also, our rivers or streams, and small lakes, could be peopled with a vast multitude and variety of the finny tribes. Fish increase very abundantly, and science will teach us to transform those of the sea into fresh water fish. Carp did not appear in England till the sixteenth century, and the plaice of the North Sea have multiplied infinitely in the ponds of the Old World.

7.—CROP AND SUPPLY OF COTTON.*

We find, on the first September, an unusually small aggregate stock on hand in our ports, and the stocks held by manufacturers smaller than usual;

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* We are indebted to George G. Henry, Esq., of Mobile, one of the most intelligent and practical merchants of that city, for this valuable paper, prepared by him as a circular to his correspondents. No man in the South is more thorough in such statistics, and more often correct in his deductions from them.

and the quantity of old cotton held in the country was a mere bagatelle. In reply to frequent inquiry, in relation to the extent of land planted in cotton, compared with former years, I was answered, in substance, that the tide of emigration, from the older cotton states, to Louisiana, Arkansas and Texas, having been checked, the increasing population engaged in factories, in rail-roads, and the natural falling off in the production of their lands, had, together, been requiring an increase of grain planting, and having planted very fully the year before last of cotton, as the prices and prospects were favorable, if anything, the quantity of land planted in cotton was hardly so great as the year before, though more largely in grain, certainly no sensible increase in cotton. They say they invariably have planted all they could cultivate; but the lands do not yield, of late, such crops of cotton as in former years.

The season for planting last spring was cold and dry generally, and backward. In some quarters there was no rain from April to August, and generally, it was the driest year ever known in the cotton regions. Raining a good deal in August, the plant seemed to have been scalded, and shed off the forms, blooms and small bolls, causing very much alarm amongst the planters. I contended with them, though, at the time, that their crops were not nearly so bad as they really thought. Later, they see they were mistaken, and confess their crops are better than they supposed; that I was correct, and they were not. It was not intended on their part to deceive; but their injudicious and wholesale complaint then, and their crops evidently yielding better than they declared, has led to an indiscriminate cry now on the other hand, that the crop will be quite large—which is as incorrect, and as much upon the other extreme.

To arrive at a practical conclusion relative to matters of this nature, we must look at probabilities; judge of the future by the past, and not too readily adopt as realities, expressions, the offspring of fear at one time, and of hope at another. I will now present the crop of the Atlantic States.

It has contended against the longest and most unusual drought I have ever noticed. I witnessed its effects there, and the appearances indicated a general failure of their crops. Some planters said, they would not make a quarter of last year's crop, some a half, &c. Let us see what the receipts of cotton at the Atlantic ports, for the past ten years, have been:

1850–1.	'49–50.	'48–9.	'47–8.	'46–7.	'45–6.	'44–5.	'43–4.	'42–3.	'41–2.
752,000	751,000	877,000	527,000	613,000	462,000	760,000	582,000	672,000	613,000

If you observe, the receipts for 1845–'46 were 462,000 bales, as above shown. You will remember that that summer was very dry; but not so dry, if anything, as the past summer and spring. Seeing that their receipts for the two succeeding years were so light, that the three together only averaged 534,000 bales; and that the third one from it, or the receipts of 1848–'49, were 877,000, we are reminded of our information that the crops of those three years were larger than represented by the receipts—as in the crop year of 1848–49, 200,000 bales of old cotton in this division alone were sent forward, made, doubtless, within these three years. We may assume then, that the crop of 1845–'46 was 500,000 instead of 462,000. If we call the Atlantic one-third short of last year's, we have for this year, you will see, a crop of 500,000 bales—and all that one sees indicates it will be much under that. Allowing for rail-road facilities, however, towards North Alabama and Tennessee—I put their crop at 610,000 bales.

Three-fourths of the receipts of cotton at the Florida ports, is derived from the eastern counties of Alabama, where their lands are strong and fresh, and the southwestern counties of Georgia. I estimate it at 170,000 bales.

The receipts at Mobile we will carefully consider; for, although we receive at least three-eighths of our cotton from high and droughty lands, a portion of the remaining five-eighths comes from low slough lands, that fail pretty much in wet years, and hence are not uniform in their yield. Such a season as this has been suits them well. I will give below the receipts at this city, from the different rivers for the past five years:

	1850-1.	1849-50.	1848-9.	1847-8.	1846-7.
Alabama River	214,000	187,000	260,000	193,000	164,000
Tombigbee	171,000	102,000	176,000	183,000	122,000
Warrior	61,000	56,000	75,000	54,000	35,000
Wagons	6,000	6,000	9,000	7,000	3,000
Total bales	452,000	351,000	519,000	437,000	324,000

Averaging for five years, 417,000 bales.

The crop last year was 452,000 bales, which was smartly over the average of the past five years. My unvarying estimate for our receipts last year, was 450,000. My conclusion with regard to the Mobile crop is—the Warrior will be 15,000 bales short, the Bigbee 10,000, and I allow to the Alabama about the same as last year, which would make for us 425,000; but my estimate for this port is 450,000 bales, and I am quite confident it will not exceed my figures.

We now come to New-Orleans. Below I will submit the statement of their receipts of cotton for part of five years, from each of their great divisions.

	1850-1.	1849-50.	1848-9.	1847-8.	1846-7.
Louisiana and Mississippi	618,000	476,000	811,000	883,000	454,000
Lake	14,000	11,000	16,000	14,000	4,000
North Alabama and Tennessee	237,000	250,000	217,000	228,000	212,000
Arkansas	64,000	45,000	47,000	66,000	36,000
Total bales	933,000	782,000	1,091,000	1,191,000	706,000

You will be struck with the fact, that from the Lake, North Alabama, Tennessee, and Arkansas, they received a heavier crop last year than for any of the past five, not excepting even the large crop years of 1847 and 1848; whilst Mississippi and Louisiana only fall a little below the average of five years. Last year the crops of the state of Mississippi on the Mississippi River bottoms and the Yazoo bottoms were fine, and although not full on the highlands, were near about an average. On the Red River, in Louisiana, the crop was short of an average. My information then respecting the New-Orleans receipts amounts to this, that the North Alabama counties are as good, compared with last year—that the Western Tennessee and North Mississippi crops, shipped from Memphis, are decidedly short, and so of the Arkansas crop. The Missisippi bottoms are as fine—the Yazoo bottoms, in Mississippi, not so good. The crops of many of the best counties are not so good—whilst some again will equal last year's. In short, the Mississippi state crop is rather *under*, than over last year. We have to further inquire how will the crop of Louisiana, this year, compare with that of last year. Last year it was about 175,000 bales. It will be increased some; but query, will it increase as much as the falling off at Memphis, in Arkansas, and Mississippi? I understand *not*—but I estimate the receipts at New-Orleans 970,000 bales.

Texas suffered, as did the other cotton regions—but allowing for some increase of land planted, I put her crop at 50,000 bales. Her very slow increase in the extent of her crop is to be ascribed to the demand the planters there have for corn and provisions from the new settlers. My estimate then stands thus, viz.:

	1850-1.	The Crop of each point last year was
Atlantic States	610,000	742,000
Florida	170,000	181,000
Mobile	450,000	452,000
New-Orleans	970,000	933,000
Texas	50,000	46,000
Total bales	2,250,000	2,354,000

Had it never before occurred, I should feel regret to know, that I differ so much from some gentlemen, as I understand I do. In reference to the estimates of 1846, I discover the prominent one of Savannah was 2,175,000 bales—the crop was 1,778,000—four hundred thousand bales less. My estimate that year was 1,700,000. Last year the big crop estimate was 2,800,000 bales. My outside

estimate was 2,300,000 bales. These large estimates are old stories, and it would be a tedious thing for me here to expose the random attacks which have been made upon this staple. I will simply add, in confirmation of my estimates, that the average production of the five years ending in 1845, of the United States crop, was 2,118,000 bales. The average of the five years, ending with 1850, was 2,264,000. The increase of the last over the first named period is less than 7 per cent., or only 1¼ per cent. per annum.

In conclusion of this branch of the subject.—SUPPLY OF COTTON—it is to be observed, that the stocks on the first of January, 1850, in the foreign ports, notwithstanding the fullness of the crop of the previous years was reduced to an unusually low figure, and the quantity in the hands of the manufacturers very small. The quantity received in Europe from India, Brazil, &c., has been larger for the past two years than it had been previously; but this appears to be in consequence of the important fact, that they can better send their cotton to England, to be returned in a manufactured state, than to manufacture it in their own rude way, as formerly, just as the old-fashioned cards, wheels and looms in the South have been almost totally abandoned, because we can buy the machine-manufactured goods too cheap to be bothered with making the wares ourselves. I emphatically remark, that there is no indication from the ascertained and established condition of things, that the annual production of cotton for years to come, will equal the annual consumption, for the reasons, that no other country is adapted to its profitable culture; that it cannot and will not be extensively produced for sale, save by slave labor; and that we, having reduced all of our lands very nearly to cultivation which produces it, cannot extend it proportionably to its extending consumption. The opinion I have before submitted in a circular, some years since, appears to have become a fixed fact, "that the production of the limited quantity of new lands annually brought into cultivation, did not more than compensate for the falling off in the old by their deterioration."

The immense number of factories of every sort, rail and plank roads, towns and elegant country mansions building and going into operation South, with our largely increasing population, is demanding the sowing and planting of vastly larger quantities of breadstuffs, than ten years ago were requisite. All of which, by the withdrawing of so much labor faom the production of cotton to the other productions and industrial pursuits, advantageously operate to favor the diminished production of cotton.

Having considered the subject of supply, that of CONSUMPTION OF COTTON will next engage our attention. To my circular of 31st August, 1850, I appended tables exhibiting the increase per cent. of production as well as consumption, for the two periods of 1839-40 to 1843-4, and 1844-5 to 1848-9—each of five years. The increase per cent. of consumption of the latter on the former period was 19½ per cent. The increase of supply or crops of same period, say the five years of 1844-5 to 1848-9 on that of 1839-40 to 1843-4, was about 8 *per cent.* I called attention especially to that extraordinary and gratifying particular, that although the annual consumption was already greater than the annual production of cotton, the ratio of increased consumption was already greater than the ratio of increased production. This cannot be too strongly impressed upon our minds. I also called attention to another fact of commanding importance, viz.: that in the latter period, 661,000 bales of cotton had been consumed which had not been reported in any of the tables I had seen or could hear of—where it has been consumed is not very important for us to know, but it is very important to know that it has been, as it exhibits, the ratio of increase in its proper view, and in rather an exciting one, if we properly understand it.

The English circulars of both last and the year before, observe that a remarkable feature will exhibit itself on the examination of their tables of consumption, and that is, that notwithstanding the high prices which had been noted throughout the year, the consumption had not only not been diminished, but that the only probable check *would be an insufficient supply.* The consumption of the present year will be largely over that of any other in Great Britain, France, and the Continent; and the rapidity of its increase in Russia, Germany, and in the south of Europe, is highly encouraging. I may properly remark here, that important as is the consumption of cotton in France, and also in Germany, that their peasantry have been, and are still relying on flax and hemp for a large proportion of their coarse clothes. Did the 35,000,000 of the French and the 70,000,000 of Germany consume cotton in the ratio that the United States, Great Britain or India do—the

crop of the United States, if *doubled*, would not supply their demand. Cotton, however, is spreading rapidly in favor and popularity in those countries. Besides its superiority in both comfort and beauty—its transcendent advantage over flax and hemp, is, that it is manufactured entirely by machinery; whereas, flax and hemp, we must remember, have to be *woven by hand*. The land that produces them too must be highly manured, and the labor of preparing for spinning is very severe, and potatoes or wheat is found a more profitable crop. Cotton is fast superseding other fabrics.

The consumption at the North has fallen off, and the mystery is thus to be solved. The operators in cotton letting the price go down so, compelled the export of large amounts of specie to fill the vacuum produced by the unnatural decline. This exportation caused the northern banks to suspend their accustomed accommodations, and the manufacturers were unable to dictate prices for their manufactures. It is not reasonable to suppose that those who are usually so sagacious will permit this unnatural state of things to be continued. They now must *support* the price of cotton. It is not a mere matter of speculation, but compulsion, as if they *do not*, the vaults of their banks must be effectually drained. Cotton and specie are the only things we have to pay the foreign debt with—that is, if with the little tobacco and rice we export, cotton does not make up the balance, specie must. Will northern capitalists close their eyes to this position? The imports are enormous, and the amount the crop must command, must correspond in a great degree with the amount of the imports.

We now arrive at the question of PRICES OF COTTON.

There are two branches to this subject. One is, what can an article be furnished at, paying its prime cost, and a reasonable profit for the use of the capital employed? This is its worth or value and commonly its price, and the other is—what can be given for a material, having ascertained what it will command in its manufactured state, deduct the cost to manufacture, and the usual profit for the use of the money from that, and the remainder is the worth or value, and ought to be the price of the material. This is merely the philosophy of prices, for each party is apt to use its skill and power to disturb this principle. But let us see for a moment the relative positions the cotton producers and the cotton manufacturers occupy in relation to this value. A few years since, for instance, the cotton planter bought lands at $1 25, and about that, per acre; now $5 to $10 are low prices. Negroes he bought at $350 to $550 a piece; now he pays $700 to $1,000, not to say anything of increased value of provisions. Then the cost of production has been largely enhanced, evidently. A few years since the manufacturer had to keep heavy stocks of goods on hand, and worked with machinery which was, compared to the modern, quite imperfect. He paid a duty on cotton, on his provisions, and money was scarce and interest high, freights high. Now, relieved of duties, with interest low, freights low, demand active for his goods, his machinery wonderfully improved, it is evident that he can afford to pay the producer more for his cotton than formerly, and yet retain equally as fine a profit. This is the relative position of the parties,—but the cotton planter can hold to his cotton longer than the manufacturer can do without it. Were we to hold on to our cottons for *ninety* days, they would not have a bale to go on; and being at our mercy, we could make them give 15 cts.

I may sum up with regard to prices, prospects of consumption and the crop—that every element that could be desired is favorable to the planter. The crop is an average one nearly—and is obliged, from the position and concurrence of things, to command a full, nay, a *high price*. It cannot be avoided. The stock on hand in Europe is fast melting away. France has no cotton at all, we may say, and is actually shivering from fear. Cargoes at sea are bid for. The stocks in England are *lower* now than at this time last year; their receipts in this month and December were unusually heavy, but this year must, from the smallness of the stock of cotton in our ports, be unusually small; while the ratio of their consumption and export is, this year, very much larger than last. Hence the stock in Liverpool on the 1st of January will be so light, that I *look* for a *panic* there *by or before then*, and if so, where will prices go? Money everywhere is abundant. The Bank of England and the Bank of France are encumbered with larger amounts of bullion than they ever had before. The harvests have been fine, food must be cheap, interest is low now and falling, trade is extravagantly good, no wars or rumors of wars. The French Republic seems to be working to suit the

people of France admirably, though some parties have been in a constant perspiration from the fear that France might do something they would not like.

Should any planter doubt the probability of my correctness, let him remember my circular of 9th January, 1849, issued when middlings here were 5 5-8. I foretold prices would go up, notwithstanding the crop *was* large, and that they would be higher the *next year*, than they might reach *that*. Remember that notwithstanding the country was swept clear, and some 300,000 bales of old cotton was sent to market with that crop altogether, swelling our receipts to 2,729,000 bales—that middling cottons sold *before* the season was out, in the face of all these tremendous receipts, at 10 1-2c., and withal the stock on hand at the end of the year was about the same as the year before, and that our average for the next season was 11 1-2c. Don't forget these things, and that the next year with a crop of 2,355,000 bales we got an average of 11 1-3c. You are sustained in a demand for a full price, by the fact staring you in the face, that you must plant next spring more corn, oats and wheat, and do something about raising hogs, as bacon at 10 to 15c. is higher than cotton would be at 20c. The chances are, you cannot make a large crop next year. You cannot plant the land to do it, and make your corn, &c.

I have refrained from making much allusion to California gold, but as the wealth of the country has been enormously added to already by it, and as all the accounts concur that gold is still abundant there, we ar certainly entitled to our share of the advantage it is conferring on the country. To that we may ascribe the swelling prices of property, and if this advances, our productions must feel its effects also.

DEPARTMENT OF COMMERCE.

1.—TOBACCO TRADE OF NEW-ORLEANS.

We continue to publish in a permanent form for public reference, &c. the commercial statistics of the last year, and shall conclude them perhaps in our next number. They are derived from the New-Orleans Prices Current, and our work contains these tables for a great many years back.

The Tobacco trade, during the past season, has been marked by extraordinary vicissitudes, which have produced remarkable fluctuations in prices; and in tracing the course of our own market, we shall find it necessary to touch, from time to time, upon that of others, by the movements in which ours has been influenced in an unusual degree.

At the commencement of the year the stock in this port, as shown by our tables, was 14,842 hhds, of which amount we estimated that factors held 6,500 hhds., and our quotations then were, for Factory Lugs 5 a 5¼; Planters' Lugs 5¼ a 6,; Leaf, common, 6¼ a 7¼; Fair to Fine 7¼ a 8½; Choice 8¼ a 9 cents per lb. For several months prior to the close of the previous season, we had received from the West, as well as from Virginia and Maryland, very gloomy accounts regarding the crop, which had induced holders to withdraw a large portion of their stocks from the market, and the quantity actually on sale probably did not exceed 2,000 or 2,500 hhds. In the month of September the demand was fair, resulting in sales of about 2,000 hhds., and an advance of ¼ cent in prices. On the 8th October, a number of telegraphic dispatches were received, announcing frost in many parts of Kentucky and Tennessee, on the morning of the 5th of that month, and stating that very great injury had been done to the crops. These accounts at once produced a speculative feeling in the market, and prices commenced to tend upward. Further intelligence from the country having fully confirmed the frost news, and this being met by advices of an important improvement in the English markets, the excitement here during the ensuing thirty days was very great, and the advance in so limited a period almost unprecedented. The sales from the 8th October to the 12th November exceeded 6,000 hhds., (being swelled to this amount by a number of re-sales,) and at the latter date our quotations were, for Lugs 7¼ a 8; Leaf, inferior to common, 9 a 9¼; Fair to Fine,

10 a 11; choice and selections, 11¼ a 12¼ cents per lb. This important advance, although caused in a great measure, no doubt, by the accounts of the damage done by the frost, and the consequently reduced estimates made of the crop, (the figures of well-informed parties then ranging from 40,000 to 50,000 hhds.,) was attributable in at least as great a degree to the upward movement that had taken place in England *prior to the receipt of the frost news in that country*, the sales in London and Liverpool, during September, having exceeded 4,500 hhds., at an advance of 1d. a 1¼ per lb. On the 6th November the London quotations for Western Leaf ranged from 3½d. to 9d., and for Western Strips, from 9d. to 15d. The bulk of the limited stock remaining on sale here in the latter part of November was in the hands of speculators, and a large portion of it having been purchased at high prices but a short time previous, it was not offered freely, even at the very full rates then quoted. The demand for some weeks following was by no means animated, but holders were enabled to realize tolerably steady prices for old crop, until the close of February, at which time the stock of old was reduced to a very low point. Of the *new crop* the first receipt was on the 14th December, an unusually late period, which tended to strengthen the impression that the extent of the yield would approximate to the lower estimates that had been made, and the smallness of the arrivals for some months served to confirm this belief. The proportion of *frosted* Tobacco in the early receipts was large, and went to show that the farmers had been induced by the high prices current here and elsewhere, to prepare and send to market an article that, at other times, they probably would have left in the fields. The extent to which this has contributed in producing the great decline that has since taken place, it would be difficult to determine; but that it was very great no one can doubt. And we may here remark with regard to the quality of the past crop, that although a small portion of it, from certain sections, has been equal, if not superior, to any that we have had here for some years past, the bulk of it has proved to be exceedingly deficient in size, substance and color.

Early in March it became known that the contract for the supply of the French Government had not been adjudicated, the Regie having rejected the lowest bids. During March the arrivals increased greatly, and before the end of that month we had become apprised that the manufacturers of England were making a determined stand, with every prospect of succeeding, against the holders of the very heavy stock then in the London and Liverpool markets, a large portion of which was known to be held on speculation by comparatively few parties. At this juncture the New-York market began to droop, the stock here was rapidly accumulating, and the history of our market for the subsequent three months may be summed up in a few words: with a large and steadily increasing stock, and with generally but one, and never more than two, large buyers operating, prices went down with almost as great rapidity as they had gone up the previous fall. Indeed, for many weeks it may be said, (and we so remarked at the time,) that we had *no market;* for the value of any description of Tobacco could not be fixed with any degree of accuracy, and many sales were forced at constantly reduced figures. This state of things continued until about the middle of July, at which period the receipts amounted to 56,296 hhds. against 53,957 the previous year, and the stock on sale was estimated at about 16,000 hhds.; our quotations were, for Frosted 2 a 3; Planters' Lugs 3¼ a 4¼; Leaf, inferior to common, 5 a 5¾; Fair to Fine, 6¼ a 7; Choice and Selections 7¼ a 8¼ cents per lb. These low prices brought buyers out more generally, and in the last twenty days of July the sales amounted to nearly 7,000 hhds., prices recovering during that period to the extent of ½ a ¾ cent, and on some qualities 1 cent per pound. Since the beginning of August the demand has been moderate, but holders have shown no disposition to push off their stocks; and the sales of the month, which sum up about 4,000 hhds., have been at steady rates, the quotations being as follows—*Frosted* 2¼ a 3¼; *Lugs*, planters', 3¾ a 5; *Leaf*, inferior to common, 5¼ a 6; Fair to Fine 6¼ a 7; Choice and Selections 7½ a 9 cents per lb. We close our tables with receipts for the past twelve months of 64,030 hhds., and with a stock on hand, including all on shipboard not cleared, of 23,771 hhds., of which 10,000 hhds. are held by factors.

With respect to the growing crop, we have to remark that the advices have varied exceedingly from time to time. In the spring it was stated that the planting was unusually large. In June and July there were great complaints of

drought in nearly every section, and a large proportion of the planting was said to have been lost in consequence of the lack of rain. Within the last two or three weeks, however, we have received accounts of refreshing showers, by which it is stated the crop has been greatly improved; and although there is no longer a probability of so heavy a yield as was anticipated by many some months ago, on the other hand there would seem to be little likelihood of any serious deficiency in the supply.

The defects in the quality of the crop, to which we have already alluded, are attributable to the unfavorable seasons for planting, growing and curing, which the farmers have had to contend with; but we deem it proper to remark, that probably no Tobacco crop has ever been sent forward, upon the preparation of which for market so little care appeared to have been bestowed. We allude to this solely with a view of calling the attention of the farmers to the fact, that if they wish to sustain the character of this market, it will be incumbent on them to give at least a reasonable share of care and attention to the *handling*, *sorting* and *prizing* of their crops.

2.—MONTHLY ARRIVALS OF FLAT-BOATS.

MONTHS.	Ohio.	Kentucky.	Indiana.	Virginia.	Pennsylva.	Illinois.	Missouri.	Iowa.	Arkansas.	Alabama.	Tennessee.	Mississip'i.	TOTAL.
September	12	5	3	2	11	..	..	..	..	..	9	..	42
October	2	3	8	1	9	..	..	..	..	..	2	..	25
November	3	4	7	..	13	2	..	..	..	..	4	..	33
December	27	3	22	..	28	..	..	..	..	..	..	..	80
January	72	3	28	1	12	..	..	..	..	..	3	..	119
February	19	4	9	1	27	..	..	..	..	..	10	..	70
March	35	6	111	..	15	9	..	..	..	..	1	2	179
April	10	7	44	3	29	5	..	..	..	..	27	7	132
May	11	11	40	1	32	3	..	..	..	..	10	1	109
June	21	3	16	1	17	..	..	..	..	..	7	..	65
July	2	6	2	..	16	..	..	..	..	..	14	..	40
August	4	3	8	2	13	..	..	..	..	..	17	..	47
Total	218	58	298	12	223	19	..	..	..	..	104	10	941

3.—COMPARATIVE PRICES OF FLOUR AT NEW-ORLEANS ON THE FIRST OF EACH MONTH, FOR FIVE YEARS:

	1850-'51.	'49-'50.	'48-'49.	'47-'48.	'46-'47.
September	$4 62½ a 5 12½	4 50 a 5 75	4 00 a 4 75	4 75 a 6 00	3 50 a 4 00
October	4 00 a 5 12½	5 00 a 5 62½	5 00 a 5 25	4 00 a 5 00	4 00 a 4 62
November	4 25 a 5 25	4 75 a 5 50	4 75 a 5 12½	5 25 a 5 62½	5 00 a 5 50
December	4 50 a 5 12½	5 00 a 5 50	4 62½ a 5 00	5 12½ a 6 00	4 87½ a 5 37
January	4 25 a 5 00	5 00 a 5 62½	4 25 a 4 75	5 50 a 6 00	4 37½ a 5 25½
February	4 25 a 5 00	5 12½ a 5 75	4 12½ a 5 00	4 75 a 5 25	6 00 a 6 50
March	4 00 a4 75	5 25 a 6 00	4 50 a 5 25	5 00 a 5 75	5 50 a 6 25
April	4 00 a 4 87½	5 62½ a 6 75	4 12½ a 5 00	5 25 a 5 87½	6 00 a 6 25
May	4 12½ a 5 00	5 37½ a 6 75	3 87½ a 5 00	4 25 a 5 25	5 75 a 6 50
June	3 75 a 4 75	6 75 a 7 87½	4 50 a 5 25	4 25 a 4 75	6 75 a 7 50
July	3 25 a 4 75	5 50 a 7 25	3 87½ a 5 00	4 25 a 5 00	6 00 a 7 00
August	4 00 a 5 25	4 00 a 6 75	6 00 a 7 50	4 00 a 4 62½	4 00 a 5 50

4.—COMPARATIVE PRICES OF MESS AND PRIME PORK.

	Mess, 1850-'51.	Prime, 1850-'51.	Mess, 1849-'50.	Prime, 1849'-50.
September	$10 25 a 10 50	8 50 a 9 00	9 25 a 9 50	8 25 a 8 37½
October	10 25 a 10 37½	8 75 a 9 00	9 75 a 10 00	8 37½ a 8 50
November	11 25 a 12 00	8 25 a 8 75	9 37½ a 9 50	8 25 a 8 50
December	11 37½ a 11 75	8 12½ a 8 50	9 37½ a 9 50	8 50 a 8 75
January	11 75 a 12 00	9 00 a —	10 50 a 11 00	8 00 a —
February	12 50 a 13 00	10 50 a 11 00	9 25 a 9 50	7 37½ a 7 62½
March	12 50 a 13 00	11 00 a 11 50	9 50 a 10 00	7 37½ a 7 50
April	13 00 a 13 50	10 75 a 11 25	9 37½ a 9 62½	7 37 a 7 50
May	14 00 a 14 75	11 75 a 12 25	9 50 a 9 75	7 75 a 8 00
June	14 50 a 14 75	12 00 a 12 50	9 75 a 10 00	8 25 a 8 50
July	14 00 a 14 37½	12 00 a 12 50	— a 12 00	9 50 a —
August	15 00 a 15 25	12 50 a 13 00	11 50 a 11 75	— a 9 75

5.—COMPARATIVE PRICES OF CORN, IN SACKS.

	1850-'51.	1849-'50.	1848-'49.	1847-'48.	1846-'47.
September.....Cents	53 a 63	35 a 46	52 a 57	50 a 55	36 a 40
October	50 a 60	42 a 48	48 a 53	50 a 75	60 a 65
November	70 a 75	50 a 55	52 a 58	41 a 50	58 a 75
December	70 a —	46 a 52	42 a 51	45 a 50	60 a 70
January	60 a 65	— a 47	35 a 40	54 a 60	55 a 67
February	60 a 68	45 a 50	34 a 43	40 a 55	80 a 90
March	52 a 58	50 a 57	30 a 41	36 a 42	75 a 90
April	50 a 58	50 a 56	20 a 40	30 a 38	80 a 95
May	46 a 54	76 a 83	30 a 45	22 a 28	55 a 70
June	38 a 51	64 a 70	50 a 55	32 a 36	65 a 80
July	34 a 57	75 a 85	50 a 53	33 a 39	65 a 75
August	34 a 60	75 a 85	50 a 56	36 a 42	40 a 55

6.—IMPORTS OF SPECIE AT NEW-ORLEANS FOR FOUR YEARS, FROM 1ST SEPTEMBER TO 31ST AUGUST:

1850-'51	$7,937,119	1847-'48	$1,845,808
1849-'50	3,792,662	1846-'47	6,680,050
1848-'49	2,501,250		

7.—DIRECT IMPORTS OF COFFEE, SUGAR AND SALT AT N. ORLEANS

	1850-'51.	1849-50.	1848-49.
Coffee, Havana, bags	10,367	20,627	16,341
Coffee, Rio, bags	274,690	225,013	299,129
Sugar, Havana, boxes	29,293	18,843	14,775
Salt, Liverpool, sacks	420,838	468,932	508,517
Salt, Turks Island, &c., bush	419,685	583,183	249,001

8.—FOREIGN COMMERCE OF NEW-ORLEANS:

TONNAGE CLEARED.

July to September, 1850.

	No. Vessels.	Tonnage.
American for foreign ports	109	44,549 63
Foreign	52	19,866 96
Coastwise	199	57,442 30
	306	121,858 94

October to December, 1850.

American for foreign ports	114	53,946 18
Foreign	66	20,937 40
Coastwise	275	76,789 20
	455	151,672 78

January to March, 1851.

American for foreign ports	188	85,747 51
Foreign	119	53,761 56
Coastwise	424	121,362 03
	731	260,871 15

April to June, 1851.

American for foreign ports	234	108,715 82
Foreign	88	34,383 15
Coastwise	329	97,579 68
	651	240,678 72

RECAPITULATION.

Total third quarter, 1850	360	121,858 94
" 4th " "	455	151,672 78
" 1st " 1851	731	260,871 15
" 2d " "	651	240,678 72
	2197	775,081 69
Total to June, 1851		775,081 69
The year previous		773,783 19
Difference		1,298 50

TONNAGE ENTERED.

July to September, 1850.

	No. vessels.	Tonnage.
American from foreign ports	61	16,176 94
Foreign	42	14,347 29
Coastwise	205	63,083 40
	308	93,607 62

October to December, 1850.

American from foreign ports	158	61,487 57
Foreign	106	40,827 33
Coastwise	303	124,585 02
	567	226,899 92

January to March, 1851.

American from foreign ports	178	64,104 41
Foreign	97	45,207 51
Coastwise	365	125,032 82
	640	234,344 79

April to June, 1851.

American from foreign ports	146	53,368 22
Foreign	88	36,617 58
Coastwise	305	123,189 65
	539	213,175 50

RECAPITULATION.

Total 3d quarter, 1850	308	93,607 68
" 4th " "	567	226,899 92
" 1st " 1851	640	234,344 79
" 2d " "	539	213,175 50
	2054	768,028 04
Total to June, 1851		768,028 04
The year previous		763,634 58
Difference		4,393 41

9.—FOREIGN EXPORTS AT NEW-ORLEANS.

AMERICAN PRODUCE.

American Vessels to Foreign Countries.

Third quarter, 1850	$6,078,397
Fourth quarter, 1850	7,983,399
First quarter, 1851	11,431,425
Second quarter, 1851	12,529,388
	$38,022,609

Foreign Vessels to Foreign Countries.

Third quarter, 1850	$2,103,110
Fourth quarter, 1850	2,719,728
First quarter, 1851	7,692,659
Second quarter, 1851	3,449,907
	$15,965,404

Coastwise.

Third quarter, 1850	$2,859,567
Fourth quarter, 1850	6,177,128
First quarter, 1851	11,707,593
Second quarter, 1851	6,484,624
	27,228,912

Total Foreign	$53,988,013
" Coastwise	27,228,912
Grand total	$81,216,925

FOREIGN PRODUCE.

American Vessels to Foreign Countries.

Third quarter, 1850	$55,192
Fourth quarter, 1850	158,316
First quarter, 1851	91,313
Second quarter, 1851	83,445
	$388,265

Foreign Vessels to Foreign Countries.

Third quarter, 1850	$14,616
Fourth quarter, 1850	18,255
First quarter, 1851	13,140
Second quarter, 1851	11,674
	57,685
Grand total	$445,950

10.—RECEIPTS BY THE NEW CANAL, NEW-ORLEANS.

Statement of Produce received in the New Basin, for the year ending Aug. 31, 1851.

Cotton, bales	40,329	Merchandise, boxes	22
Lumber, yellow pine and cypress, feet	33,107,000	Moss, bales	205
Wood—oak, ash and pine, cords	27,828	Cotton seed, bags	95
Bricks	24,000,000	Wool, bags	30
Sand, barrels	197,600	Sugar, hogsheads	970
Shells, barrels	52,200	Molasses, barrels	772
Charcoal, barrels	110,600	Fish, barrels	51
Tar, barrels	2,239	Camphene, barrels	6
Shingles	2,392,000	Knees	1,480
Laths	3,160,000	Pickets	24,900
Staves	632,000	Clap-boards	43,900
Sash and doors, pairs	7,800	Gunny Bags, bales	135
Spirits turpentine, barrels	3,094	Hoop Poles	40,000
Rosin, barrels	10,250	Horned Cattle	200
Salt, sacks	15,799	Pork, barrels	95
Cotton Gins	549	Beeswax, boxes	1
Hides	3,955	Paper, bundles	61
Corn Mills	70	Castor Oil, cans	81
Domestics, bales	959	Lime, barrels	1,002
Sheep skins, bales	8	Hemp, bales	20
Hay, bales	35	Lime, casks	129
Buckets, dozen	632	Cement, barrels	150
Tobacco, leaf, boxes	758	Plaster, hogsheads	12

11.—UNITED STATES BRANCH MINT.

Statement of the Deposits and Coinage at the Branch Mint, New-Orleans, from the 1st of August, 1850, to the 31st of July, 1851, inclusive:

GOLD DEPOSITS.

California gold bullion,	$8,152,878 82	
Other gold bul.	132,758 32	
Total gold dep't		$8,285,637 14

SILVER DEPOSITS.

Silver extracted from California gold	$57,571 61	
Other silver bullion	764,513 64	
Total silver dep'ts		$822,085 25
Total value of gold and silver deposits		9,107,722 39

GOLD COINAGE, 1850–'51.

	Pieces.	Value.	
Double eagles,	333,500.	$6,670,000	
Eagles	149,500	1,495,000	
Half Eagles	33,000	165,000	
Quar. Eagles.	204,000	510,000	
Gold Dollars.	154,000	154,000	
			$8,994,000

SILVER COINAGE.

	Pieces.	Value.	
Dollars	3,000	$3,000	
Half Dollars	1,712,000	856,000	
Quar. Dollars.	276,000	69,000	
Dimes	530,000	53,000	
Half Dimes	1,030,000	51,500	
Three Cent Pcs.	600,000	18,000	
	4,151,000		$1,050,500
Total coinage	5,025,000		$10,044,500

12.—COMMERCE OF CHARLESTON.

Statement of Cotton and Rice at Charleston.

Exported to	From September 1, 1850, to Aug. 31, 1851. S. I.	*Upl'd.*	*Rice.*	From September 1, 1849, to Aug. 31, 1850. S. I.	*Upl'd.*	*Rice.*
Liverpool	11244	175320	4853	11858	137559	8181
Scotland	11	7341	1	13	5549	2
Other British ports	—	10054	9260	—	10644	11375
Total Great Britain	11255	192715	14114	11871	153752	19558
Havre	2321	21034	2918	2495	29695	4577
Marseilles	—	—	—	—	—	—
Other French ports	—	2253	2209	—	892	2831
Total France	2321	23287	5127	2495	30587	7408
Holland	—	814	2401	—	2068	3268
Belgium	—	3299	2500	—	4130	5322
North of Europe	—	9046	17234	—	2746	21571
Total N. of Europe	—	13159	22135	—	8944	30341
South of Europe	—	25281	697	—	19922	260
West Indies, &c.	—	—	19010	—	—	16416
Total foreign ports	13576	254442	61083	14366	213205	73992
Boston	10	16774	8161	30	22690	8182
Rhode Island, &c	19	2435	20	18	4556	157
New-York	2181	102004	29317	2023	99863	30022
Philadelphia	—	11138	5848	—	15564	5133
Baltimore & Norfolk	—	7890	5203	—	9236	4405
New-Orleans, &c	—	—	15284	—	—	12284
Other U. S. ports	—	—	250	—	152	250
Total coastwise	2210	140241	64083	2071	152122	60434
Grand total	15786	394683	125166	16437	365327	134417

Comparative Export of Rough Rice and Lumber, from the Port of Charleston.

Exported to	From Sept. 1, 1850, to Aug. 31, '51. R. Rice, bus.	Lumber, ft.	From Sept. 1, '49, to Aug. 31, '50 R. Rice, bus.	Lumber, feet.
Liverpool	57902	8000	42824	345059
London	165015	—	202960	—
Other British ports	100	68434	—	124944
Total to Great Britain	223017	76434	245784	470003
Havre	75	28693	2071	48422
Bordeaux	21147	332725	26032	15970
Other French ports	—	4316	—	—
Total France	21222	365725	28103	64392
North of Europe	138133	995901	254017	1328408
South of Europe	—	654816	—	1083636
West Indies, &c.	—	1536867	—	1813402
Total foreign ports	382372	3629733	527904	4759841
Boston	40204	647312	3733	209005
Rhode Island, &c	—	2462758	—	2413760
New-York	21147	1033234	50195	750500
Philadelphia	—	5017334	—	5918304
Baltimore and Norfolk	—	3321060	—	1283407
Other United States ports	—	2023800	—	3372168
Total coastwise	61351	14505498	53928	13947144
Grand total	443723	18135231	581832	18706985

13.—COMMERCE OF MOBILE.

Exports of Sawed Lumber from this Port since September 1st, 1850.

WHITHER EXPORTED.	This week.	Previously.	Total.	Last season.
Cuba	—	2104862	2104862	968471
Mexico	—	268523	268523	250924
Other ports	—	12420	12420	334718
Coastwise	230680	4199569	4430249	4739783
Total	230680	6585374	6816054	7293896

Exports of Staves from this Port since 1st September, 1850.

WHITHER EXPORTED.	This week.	Previously.	Total.	Last year.
Cuba	—	8000	8000	—
Mexico	—	—	—	—
Other ports	727	105099	105826	272019
Coastwise	36540	210413	246953	405924
Total	37267	323512	360779	677943

Comparative Exports of Staves from this Port for four years, to date.

WHITHER EXPORTED.	1850-'51.	1849-'50.	1848-'49.	1847-'48
Cuba	8000	—	24500	21000
Mexico	—	—	—	—
Other ports	105826	272019	87070	328240
Coastwise	246953	405924	141820	212960
Total	360779	677943	253390	562200

Comparative Exports of Sawed Lumber from this Port for five years, to date.

WHITHER EXPORTED.	'50-'51	'49-'50.	'48-'49.	'47-'48.	'46-'47.
Cuba	2104862	1968471	333290	1373548	329173
Mexico	268523	250924	264189	1094294	878479
Other ports	12420	334718	190308	414028	216636
Coastwise	4430249	4739783	4499286	4737223	4309846
Total	6816054	7293896	7619093	5734134	3597253

Exports of Timber, &c., from this Port since September 1st, 1850, to date.

ARTICLES.	Great Britain.	France.	Other ports.	Coastwise.	Total.
Timber, pieces	100	1473	302	—	1875
Spars	—	414	130	—	544
Masts	—	2	59	—	61
D'k Plank, feet	—	7560	88317	—	95877
Oars	—	1891	—	—	1891
Shingles	—	—	92000	203000	295000
Cedar, Logs	—	—	—	1315	1315
Laths	—	—	6000	—	6000

Statement of the Value of Imports and Duties at this Port for the third and fourth quarters of 1850, and the first and second quarters of 1851.

Third Quarter, 1850.

Value of imports, dutiable..... 7,640
Value of imports, free..... 35,456

Total imports.....$43,096
Amount of duties collected, $4,249 90.

Fourth Quarter, 1850.

Value of imports, dutiable..... 76,069
Value of imports, free..... 84,360

Total imports.....$160,429
Amount of duties collected, $25,043 20.

First Quarter, 1851.

Value of imports, dutiable..... 101,632
Value of imports, free..... 23,223

Total imports.....$124,255
Amount of duties collected, $33,566 44.

Second Quarter, 1851.

Value of imports, dutiable..... 105,024
Value of imports, free..... 7,600

Total imports.....$112,624
Amount of duties col'd, $33,417 40.
Total amount of imports.....$440,404

Total amount of duties collected for the past year.....$96,276 94

14.—COMMERCE OF CINCINNATI.

We are indebted for the following to the Cincinnati Prices Current:

Imports into Cincinnati for five years, commencing September 1st, and ending August 31st, each year:

ARTICLES.	1846-'47.	1847-'48.	1848-'49.	1849-'50.	1850-'51.
Apples, green, barrels	26992	28674	22109	6445	16934
Beef, barrels	186	659	348	801	1101
Beef, tierces	5	—	27	15	18
Bagging, pieces	5561	79228	2094	324	—
Barley, bushels	79390	165528	87460	137925	111257
Beans, bushels	11688	8757	3067	5565	31037
Butter, barrels	6345	6625	7791	3674	8259
Butter, firks. & kegs	7090	6405	7999	7487	11043
Blooms, tons	2017	2203	9519	2545	2727
Bran, &c., sacks	14594	1941	21995	49075	50976
Candles, boxes	207	133	414	718	697
Corn, bushels	896258	361315	344810	649227	489195
Corn Meal	56775	29542	5504	3688	5508
Cider, barrels	3261	2289	4346	453	1047
Cheese, casks	483	164	281	97	74
Cheese, boxes	120301	138800	143265	165940	205444
Cotton, bales	12528	13476	9058	8551	7168
Coffee, sacks	59337	80242	74961	67170	91177
Codfish, drums	292	311	515	464	441
Cooperage, pieces	186186	179946	147352	201711	146691
Eggs, bxs. and bbls	561	4035	4504	2041	5956
Flour, barrels	512597	151518	447844	231859	482772
Feathers, sacks	2768	4467	4908	3432	2858
Fish, sund, barrels	16836	19215	18146	14527	19826
Fish, kegs and kits	2142	725	1059	1290	2694
Fruit, dried, bushels	82871	27464	38317	11802	41824
Grease, barrels	482	585	878	1169	876
Glass, boxes	18002	20281	33868	34945	37099
Glassware, packages	17121	15025	19209	25712	28619
Hemp, bundles and bales	26678	15349	11161	12062	13254
Hides, loose	24376	33745	23766	30280	8132
Hides, green, lbs	7513	10829	22774	14181	25424
Hay, bales	7049	8036	12751	14452	12691
Herring, boxes	1603	4191	2960	3546	3832
Hogs, head	38774	49847	52176	60902	111485
Hops, bales	1064	645	238	799	756
Iron and Steel, pieces	188215	197120	187864	186832	225039
Iron and Steel, bundles	33463	34213	29889	55168	66809
Iron and Steel, tons	1685	827	1768	2019	2570
Lead, pigs	43675	39607	45544	49197	59413
Lard, barrels	21991	37978	28514	34173	36848
Lard, kegs	22722	41714	48187	63327	31087
Leather, bundles	5069	6579	6975	9620	10397
Lemons, boxes	2185	3068	4181	4183	3379
Lime, barrels	32016	63364	61278	56482	57537
Liquors, hhds. and pipes	3369	3115	4476	5802	1465
Merchandise & sund. pks	263940	381537	68582	308523	175138
" " tons	7941	7308	837	4540	3370
Molasses, barrels	27218	51001	52591	54003	61490
Malt, bushels	12562	7999	29910	41982	21356
Nails, kegs	54918	59983	55893	83073	83761
Oil, barrels	5663	6618	7427	5049	6764
Oranges, boxes and bbls	4137	5007	4317	6819	9302
Oakum, bales	1100	1486	1423	1799	1739
Oats, bushels	372127	194557	185723	191924	164238
Oil Cake, pounds	2225988	2811793	1767421	27870	194000
Pork and Bacon, hhds	5476	4420	6178	7564	6277
Pork and Bacon, tierces	124	140	465	2358	1183
Pork and Bacon, barrels	40581	69828	44267	43227	31595
Pork, in bulk, pounds	8027399	9643063	9249380	1325756	14631330
Potatoes, barrels	15829	22439	17269	3898	19649
Pig Metal, tons	15868	21145	15612	17211	19110
Pimento & Pepper, bags	3180	3455	1957	2558	2027

Imports into Cincinnati, continued.

ARTICLES.	1846-'47.	1847-'48.	1848-'49.	1849-'50.	1850-'51.
Rye, bushels	41016	24336	22233	23397	44308
Rosin, &c., barrels	5004	11668	3298	12349	12511
Raisins, boxes	11990	22795	14927	11936	15648
Rope, Twine, &c	8003	7806	3950	3061	2007
Rice, tierces	1145	2494	3365	3556	4780
Sugar, hogsheads	16649	27153	22685	26760	29808
Sugar, barrels	7196	11175	7575	13005	18584
Sugar, boxes	5117	2928	1847	2467	3612
Seed, flax, barrels	25753	32060	22859	15570	20319
Seed, grass	4964	4968	5929	4432	4104
Seed, Hemp	290	214	510	314	68
Salt, sacks	56292	65265	76985	110650	50474
Salt, barrels	124360	94722	76496	114107	79358
Shot, kegs	1118	809	818	1447	1567
Tea, packages	5443	2931	7412	9802	7821
Tobacco, hogsheads	6200	4051	3471	3213	3701
Tobacco, bales	822	1229	1311	887	1697
Tobacco, boxes and kegs	9241	14815	12463	17772	19945
Tallow, barrels	1748	2473	1829	1225	3682
Wines, bbls. and qr. cks	4006	2251	2663	6874	3401
Wines, bkts, and boxes	1419	2272	2101	4296	5060
Wheat, bushels	590809	570813	385388	322699	388660
Wool, bales	2960	1943	1686	1277	1866
Whiskey, barrels	184639	170436	165419	186678	244044
Cotton Yarn, packages	9271	6403	5562	3494	5577
Cotton, bales	146541	288095	262893	174885	124594

Exports from Cincinnati for two years.

ARTICLES.	1849-'50.		1850-'51.	ARTICLES.	1849-'50.		1850-'51.
Apples, green, barrels	3519	..	8064	Lard Oil, barrels	16984	..	26110
Alcohol, barrels	3309	..	5038	Linseed Oil, barrels	4879	..	7821
Beef, barrels	7558	..	19937	Molasses, barrels	25878	..	25098
Beef, tierces	6625	..	9356	Oil Cake, tons	743	..	963
Beans, barrels	2469	..	1832	Oats, sacks	5023	..	11707
Brooms, dozen	7355	..	8735	Potatoes, barrels	5283	..	19823
Butter, barrels	964	..	3258	Pork and Bacon, hhds	23529	..	30200
Butter, firkins and kegs	24393	..	36185	Pork and Bacon, tcs	22477	..	20762
Bran, &c., sacks	4322	..	5789	Pork and Bacon, bbls	193581	..	122086
Bagging, pieces	9353	..	8212	P'k & Bacon, bulk, lbs	13448	..	2974
Corn, sacks	57248	..	20137	Pork, boxes	2310699	..	4753953
Corn Meal, barrels	1179	..	2148	Rope, &c., packages	3151	..	6272
Cheese, casks	106	..	25	Soap, boxes	17443	..	21553
Cheese, boxes	86902	..	121755	Sheep, head	—	..	460
Candles, boxes	67447	..	113412	Sugar, hogsheads	9650	..	13000
Cattle, head	30	..	440	Salt, barrels	29509	..	28585
Cotton, bales	1896	..	5132	Salt, sacks	8301	..	7144
Coffee, sacks	22030	..	38158	Seed, flax, bbls	333	..	443
Cooperage, pieces	73637	..	63804	Sundry mdze., pkgs	615641	..	349181
Eggs, barrels	4246	..	7258	Sundry mdze., tons	11109	..	10350
Flour, barrels	98908	..	390131	Sundry liquors, bbls	11798	..	19297
Feathers, sacks	5380	..	4095	Sundry man'fac's, pcs	56810	..	22103
Fruit, dried, bushels	1850	..	17480	Sundry produce, pkgs	10327	..	13958
Grease, barrels	7597	..	4426	Starch, boxes	9491	..	14109
Grass, seed, barrels	2528	..	2830	Tallow	4311	..	5927
Horses, head	468	..	599	Tobacco, kegs and boxes	6905	..	18345
Hay, bales	564	..	638	Tobacco, hogsheads	4847	..	2856
Hemp, bales	1164	..	3112	Tobacco, bales	77	..	160
Hides, lbs	62865	..	48079	Vinegar, barrels	2404	..	3756
Hides, number	11925	..	12459	Whiskey, barrels	179540	..	231324
Iron, pieces	54075	..	108255	Wool, bales	2156	..	2725
Iron, bundles	36245	..	44110	Wool, pounds	16841	..	4836
Iron, tons	5767	..	9776	White Lead, kegs	40294	..	50857
Lard, barrels	38192	..	30391	Pieces Castings	54399	..	36266
Lard, kegs	170167	..	71300	Pieces Castings, tons	2385	..	1121

Value of specific articles imported into Cincinnati from September 1, 1850, to September 1, 1851, and the corresponding time last season.

ARTICLES.	1850–'51. Amount.	Average price.	Total value.	Last season.
Apples, barrels	16934	$1 00	$16934	$11278
Beef, barrels	1101	11 00	11010	7209
Barley, bushels	111257	90	100131	103443
Butter, barrels	8259	12	99108	99198
Butter, kegs	110431	10	110430	59869
Blooms, tons	2727	60 00	165620	152700
Corn, bushels	489195	40	195662	246706
Cheese, boxes	205444	2 00	410888	398206
Cotton, bales	7168	40 00	286720	384795
Coffee, sacks	91177	10	91177	1310633
Flour, barrels	482772	3 50	1689702	1101329
Hemp, bales	13254	15 00	198810	168868
Hogs, head	334000	7 50	2505000	2460000
Lead, pigs	59413	3 00	207945	167208
Lard, barrels	36889	17 50	64557	444246
Lard, kegs	31087	3 50	108804	151984
Molasses, barrels	61490	12 00	733880	594033
Oats, bushels	163258	35	11140	57577
Bacon, hogsheads	6277	50 00	313850	249579
Bacon, tierces	1183	25 00	29575	28296
Pork, barrels	31595	12 00	37940	381350
Pork, pounds	14637330	5½	804723	497156
Pig Metal, tons	16110	25 00	402950	447486
Rice, tierces	4783	25 00	119575	85344
Sugar, hogsheads	29808	60 00	1708480	1364763
Sugar, barrels	18584	14 00	260176	195075
Sugar, boxes	3612	30 00	108360	57208
Wheat, bushels	588660	70	272062	302756
Whiskey, barrels	244047	8 00	1952376	1650102

The total value of the above this year is $13,146,348, against $12,668,379 last year.

Destination of specified articles exported from the Port of Cincinnati.

COMMODITIES.	To New-Orleans.	To other down river ports.	To up river ports.	Via canals and railways.	By flat-boats.
Beef, barrels	19319	68	314	236	1611
Beef, tierces	8677	8	657	14	96
Butter, barrels	1850	867	2	539	—
Butter, firkins and kegs	35200	959	15	8	315
Corn, sacks	15672	3519	156	790	—
Cheese	69258	48432	2165	1900	920
Candles, boxes	76245	20272	10695	6195	522
Cotton, bales	—	10	3182	1940	
Coffee, sacks	10	12439	7853	17856	—
Flour, barrels	281609	95943	7719	4859	95877
Iron, pieces	6608	54894	6634	40119	—
Iron, bundles	1503	25281	2182	15144	—
Iron, tons	64	1341	219	8152	117
Lard, barrels	22854	117	3277	4143	1821
Lard, kegs	56380	5358	5739	2823	1587
Lard oil, barrels	13617	1547	3726	7220	—
Linseed oil	4443	1362	1042	974	—
Molasses	33	2665	12711	9589	—
Pork, hogsheads	19044	1313	8809	1054	1312
Pork, tierces	11341	18	8759	644	42
Pork, barrels	112622	1055	3801	4608	3781
Pork, pounds	1345860	755860	1559280	1092953	525820
Soap, boxes	9425	6440	3600	2068	375
Sugar, hogsheads	—	1426	4378	7196	—
Whiskey, barrels	140661	56164	31231	3268	17980

Average price N. O. sugar and molasses, Rio coffee, corn, flour and wheat, at Cincinnati.

MONTHS.	N. O. Molasses.	N. O. Sugar.	Rio Coffee.	Corn.	Flour.	Wheat.
September	cents 34¼	7	12½	49	$3 55	70
October	35	6¾	12	44	3 57	70
November	33	5¾	11	33	3 54	68½
December	29¾	6	11¼	37	3 68	75
January	28¼	6¼	15¾	39¼	3 67	76
February	29¾	6	12	39½	3 52	71¾
March	32	5½	11¾	37	3 43	67
April	33¼	6	11½	37	3 48	71
May	34	6¼	10¼	37	3 47	70¼
June	34	6¼	9¾	37	3 35	70¾
July	33	6¼	9¼	37	3 15	63
August	33	6	9½	37	3 90	69

DEPARTMENT OF MANUFACTURES.

1.—INDIA COTTON AND MANUFACTURES.

THE last letter of the London correspondent of the National Intelligencer, gives us the following items concerning the cultivation of cotton and manufactures in India:

"The annual crop of cotton, and the ability of different countries to furnish that raw material to the manufacturers of England, is every day becoming a subject of increasing importance. The capability of India to furnish this raw material to a considerable extent, has never been doubted; but hitherto there have been great difficulties in forwarding it from the place of growth to the port of shipment for Europe. These difficulties are, however, rapidly diminishing, and the quantity received thence in England, has increased from 70,000,000 pounds weight, in 1849, to nearly 120,000,000 pounds in 1850: the former being about nine per cent. of the whole quantity imported into England, the latter about eighteen per cent. of that importation. The proportion this year will be still larger.

"The Great Exhibition, which has just closed, has not only presented numerous samples of the raw cotton of India, but has also shown us the great degree of perfection to which the natives of that country have, by mere manual operation, unassisted almost entirely by European science and mechanism, brought their manufactures of cotton. Muslin tissues have been exhibited, ten yards long and one yard wide, weighing only 3 oz. 2 dwts. each, and capable of being passed through a wedding ring. They are literally of a gossamer texture, and more resemble what might be the work of fairies than the produce of human fingers. We have, indeed, hitherto known more of the law and deceitful politics and contemptible policy of the rulers, both native and European, of India, than of the patience and industry, the ingenuity and skill, the social arts and admirable ability of the people. The exhibition has given a new turn to our thoughts. India will henceforward receive a large additional share of the attention of the merchants and manufacturers of England, as well as more of the fostering care of the government, and the benevolent regards of philanthropists, and of all who really wish to improve the condition of a hundred millions of human beings. India has been renowned for her muslin fabrics for more than sixteen hundred years; yet how few of the six millions of the visitors to the Crystal Palace ever before possessed the means of beholding a sample of those fabrics! It is not probable, however, that these cobweb-like tissues, beautiful and wonderful as they are, will produce any great effect upon the general distribution of the trade and commerce of the world. They, as well as many other proofs of the skill and capability of the natives which the Exhibition contained, cannot fail to excite an endeavor to turn that skill and capability to a more profitable purpose than they have hitherto been employed in; thereby improving the condition of the people and adding to the resources of the British empire. Parliament will, undoubtedly, during the next session, earnestly take up the affairs of India, particularly with respect to the produce of cotton and the means of facilitating its importation to Europe; and, although the manufacturers of Manchester and Bolton must, for several years to come, under any circumstances, rely for the principal portion of the raw material upon the United States, it is equally true that every year will find them more and more independent of the casualties which may arise from their being dependent upon a single market. It must also be borne in mind, that there is every year a remarkable increase in the consumption of cotton fabrics, and there is as little chance of raw cotton becoming a drug in the market, through an undue proportion between its supply and the demand for it, as there is of gold becoming too plentiful from the discovery of the rich mines of California and Australia."

2.—MANUFACTURES AT THE SOUTH.

The history of manufactures is a singular and useful one, whether we regard it as a matter of industrial enterprise or political speculation. Nations as well as individuals are sometimes compelled to serve apprenticeships, and nothing illustrates this remark so well as the history of those countries, which, by their manu-

factures, have become wealthy and independent. We will go no further back than to the time when England was in a condition of vassalage to Holland and the Netherlands, in respect to this most important feature of her industry and greatness. The markets of London, we are informed, were filled "with iron, lumber, and leather, ready manufactured. The English grew food for the Dutch, and the Dutch ate it; wool for the Dutch, and the Dutch wove it." But this condition lasted only long enough for England to become as thoroughly acquainted with manufacturing as her taskmaster was; when, throwing off the shackles which made her dependent, that imperial system of British manufactures was established, which has reared an empire the most magnificent in wealth and power the world has ever seen.

America, in her colonial condition, was to Great Britain what Great Britain had been to the German States. The house of commons so considered it, when they declared "that the erecting of manufactories in the colonies tended to lessen their dependence upon the mother country." It is well known to every one at all conversant with the early history of his country, that it was only after our political independence was achieved that we turned our attention to profitable manufactures. And no lover of his country can ever forget, that from the year 1807 to 1815, during the embargo, non-intercourse act, and the war, dates our industrial independence of Great Britain; and that those very acts gave an impetus to manufactures, trade, and business, which were beyond precedent profitable.

We do not mean by these comparisons to excite sectional jealousy, or persuade the South that she has been in a condition of degrading vassalage to the North. We only wish the South to feel that the term of her apprenticeship has expired. We would desire to impress upon the minds of her people the conviction that the advantages which they possess over the North for the manufacture of cheap and coarse goods, (for to manufacture the finer qualities will require more experience and capital than they now possess,) are many and important. Cheap living, low wages, cheap cotton, coal and iron, constitute the great elements of success in the introduction and successful prosecution of cotton manufacture. No country in the world possesses these elements in a degree equal to the Southern and Southwestern States. Heretofore the capital and industry of this large section of the country have been almost entirely devoted to agricultural pursuits. By diversifying their labor, in the manner we have proposed, they ensure their independence both of England and the North; while their labor, thus diversified, is made more profitable to themselves. The cotton is ready at their doors, and costs them one cent per pound less than it does the Northern manufacturer. The cost of transportation from the field to some Southern port, thence to Northern factories, the cost of insurance, payment of agencies, profits to manufacturers, and cost of re-transportation back in the form of cloth: all these are items which go to swell the difference in the profits which the Northern and Southern manufacturer receives.

Nor are we without hope that the interest which has been excited on this subject will not be profitless. Already it is estimated that Georgia has in operation 40 cotton mills, using 80,000 spindles, and consuming 45,000 bales of cotton annually; in Tennessee there are 30 factories, and 36,000 spindles; in South Carolina there are 16 factories, 36,500 spindles, and 700 looms, consuming 15,000 bales of cotton; Alabama has 12 factories, 12,580 spindles, and 300 looms, consuming 9,500 bales of cotton. Thus in four States alone there are 98 factories, besides those in process of building, working 140,000 spindles, consuming probably 75,000 bales of cotton annually; and, if they go on increasing for the next five years as they have for the past five, we may safely calculate on some 200 cotton mills in operation in the Southern States, consuming annually over 200 000 bales of cotton, and giving employment to some thirty or forty thousand operatives.

Thus we see the work has already commenced. Southern planters have the monopoly of this great staple. They will not hereafter be so entirely at the mercy of English or Northern purchasers. They can manufacture that description of goods mostly in demand by the planters themselves, such as osnaburgs, sheetings, yarns, jeans and linseys, cheaper by far than their competitors. They can lay the foundation for future wealth and power as Great Britain did. They will add both to their commercial and political power. They will encourage the immigration of an industrious, hardy and enterprising population. By this increase of population and of wealth, the Southern States will be enabled to bind

themselves together by a net-work of rail-roads. They can then perfect their internal improvements, increase the facilities of intercommunication, develop their boundless resources, and become what they long since should have been, among the richest, most active and powerful states of the Union.—*Dry Goods Reporter.*

3.—NEW COTTON FACTORY.

The Selma Enterprise says, Dallas county can at last boast of one Cotton Factory; and while we have so many men of capital in our midst, who have not as yet turned their attention to this branch (as well as others) of manufacturing, it gives us great pleasure in stating that the present proprietor (Mr. Jones M. Gunn) of the factory just put in operation, has had energy and enterprise enough to build and start the factory upon his own responsibility.

We have been furnished with the size of the building, machinery, plan of operating, &c. The building is brick, two stories high, covered with tin, and is ninety-two feet long and forty-five wide. This factory has now in operation 1,152 spindles, and all other machinery necessary for cleaning and preparing the cotton. The whole machinery is driven by a forty-horse power steam engine, with two double flue boilers 38 inches in diameter. It is the intention of Mr. Gunn to add looms to this factory next summer.

We hope our enterprising friend will be liberally supported and encouraged. He can furnish merchants and dealers in cotton yarns, with any quality and quantity they may desire.

4.—COAL OF CHATTANOOGA.

Few persons are probably aware of the amount of coal brought to this place either for domestic consumption or for shipment to points below. We learn from Messrs. Vaughn and Thomason, proprietors of the coal yard in this place, that they are now sending down the rail-road, between *three and four hundred bushels daily.* Most of this is taken by the proprietors of the Etowah Iron Works. Several of the Georgia Rail-road companies also take a large amount. The demand is constantly increasing, and the trade is susceptible of an almost indefinite expansion; and when adequate facilities shall be afforded for carrying it on, it will take rank as a leading branch of business at this point. The mine from which this coal is obtained, is in Roane county, about 80 miles up the river. The bed is inexhaustible, and the expense of getting out the coal is comparatively small, so that it can be brought here and placed upon the cars at 15½ cents per bushel, and yield fair profits.

The proprietors now employ between 50 and 60 men. They contemplate placing a "Steam Tug" upon the river, for the purpose of towing their coal boats to and from the mine. This will so shorten the time and diminish the expense of transporting their coal, that they will be able to do a much larger business, and with greater profits than at present.

In addition to this, the Iron Manufacturing Company of this place possess one of the best coal mines in the world, where they obtain their own supplies, and from which an immense amount may be thrown upon the market as soon as the avenues of communication shall be sufficiently perfected, and its shipment to distant parts made profitable. The coal of East Tennessee is destined to become one of her greatest sources of wealth, and it gives us pleasure to bear testimony to the enterprise that is contributing to hasten on this result.—*Chattanooga Advertiser.*

DEPARTMENT OF INTERNAL IMPROVEMENTS.

1.—MISSISSIPPI RIVER AND TEXAS RAIL-ROAD.

A convention has lately been held at Shreveport, in which many counties of Texas and parishes of Northwest Louisiana were represented. The convention, after passing the following resolutions, and inviting a convention at Monroe, Louisiana, on the 8th of December, adjourned.

Whereas rail-roads greatly promote the interests of the regions through which they pass by facilitating intercourse, by enlarging the area of trade and business, by developing resources, promoting emigration, and by generally stimulating the energies, and increasing the physical and social enjoyments of the people; and whereas great inconvenience and injury is sustained by the people residing in the northern portion of Louisiana, in Southern Arkansas, and in Northern and Eastern Texas, for want of a safe, cheap and speedy channel of trade with the great markets of the United States; and whereas the high and important interest involved imperatively demand immediate and decided action:

Resolved, That the construction of a rail-road from Vicksburgh, or some other point on the Mississippi River, via Monroe, Minden, Shreveport and Greenwood, La., and Marshall, Texas, and westward towards El Paso, is a work greatly needed by a large, fertile and important region of country, and we pledge the aid of our means, our time and our influence, to accomplish an end so desirable.

Resolved, That to facilitate the end in view, memorials be sent to the next legislature of this state, comprehending the following objects:

1. The repeal of the existing corporation laws of the state, and the enactment of others better adapted to the formation and organization of rail-road companies in the state.

2. That the police juries of the several parishes of Caddo, Bossier, Claiborne, Jackson, Washita, Franklin and Madison be empowered by an act of the legislature to levy a special tax, to be called the Mississippi, Louisiana, and Texas Rail-road Tax, on all the real estate within their respective limits; provided that no such tax shall be binding, unless approved by a majority of the legal voters of the respective parishes, at a special election to be held for that purpose; and that each tax payer shall receive in the stock of the company an amount of stock equal to the tax which he may have paid.

3. That our legislature be requested to memorialize Congress, with a view of obtaining for the rail-road in contemplation, such of the contiguous public lands as is customary to grant, to assist the company in the completion of this important public work.

4. That the legislature of the state be requested to donate to the said rail-road such of the overflowed lands, recently granted to the state by Congress for the purpose of internal improvements, as may lie near the contemplated rail-road.

Resolved, That on account of the vast importance of this rail-road to the cities of Vicksburg and New-Orleans, we rely confidently on their aid and co-operation in its construction.

Resolved, That the chairman of the meeting appoint a committee to prepare the memorial to the legislature of the state mentioned in the second resolution, and to procure the signature of the citizens interested, before the legislature assembles, and to take all necessary steps to further the objects of the meeting.

Resolved, That a committee of five be appointed to ask of the War Department the appointment of a competent engineer from the Topographical Corps, to survey the route of the proposed road, it being on the most direct and practicable route by El Paso to the Pacific Ocean: and that said committee ask the aid of our senators and representatives in Congress in procuring the services of said engineer.

2.—TURNPIKES OF TENNESSEE.

We are indebted to V. K. Stevenson, of Tennessee, for the following list of these works, which speaks very much for the spirit of that state. Tennessee, in addition, will soon have a rail-road system superior even to Georgia.

Nashville and Louisville road, via Gallatin to Kentucky, line 47 miles, and branch by Bowling Green, 28 miles; branch from Gallatin to C. R., 7 miles; branch from Gallatin and Hartsville, 25; Nashville and Springfield, 35; branch to White Creek, 6; branch to Hyde's Ferry, 3; branch by Phillip's, 9; Nashville and Buena Vista Springs, 7; N. and Hyde's Ferry and Cumberland Valley, 28; N. and Charlotte, 30; N. and Harpeth, 20; N. and Hillsboro, 25: N. and Lower Franklin, 10; N. and Franklin, Columbia and Tennessee River, 74; branch road, 18; Franklin, 10; Eastern, 12; Columbia to Alabama line, 40; Columbia and Lawrenceburg, 25; Western, 10; Nashville and ——, 25; Nashville and Mill Creek, 10; Nashville, Murfreesboro and Shelbyville, 55; Murfreesboro and Lebanon, 33;

Murfreesboro and McMinneville, 25; Murfreesboro, Manchester and Cumberland Mountain, 55; Murfreesboro and Statesville, 18; Shelbyville and Statesville, 18; Shelbyville and Lynchburg, 20; Shelbyville and Giles County, 20; Lynchburg and Tulohoma, 20; Nashville and Old Jefferson, 20; Nashville, Lebanon and Sparta, 55; Lebanon and Cumberland R. R., 8; Lebanon and Statesville, 12. Total, 855 miles.

3.—BALTIMORE AND THE WEST.—OUR RAIL-ROAD CONNECTIONS.

The late highly favorable annual report of the Baltimore and Ohio Rail-road Company is attracting much attention in the western states, and the present success of the road, and the certain promise of its early completion, give the highest satisfaction in that quarter. In this connection, it is a matter of interest to the people of Baltimore to learn from the Chillicothe Gazette, that the friends of the great east and west rail-road, projected from Cincinnati to the Ohio river, to connect with the Baltimore road at Marietta and Belpre, intend to hold a celebration of the commencement of the work west of Greenfield, at New-Vienna, in the county of Clinton. The Cincinnati Gazette has the following interesting article on this whole subject:

Cincinnati and Baltimore Central Rail-way Line.—We have before us the twenty-fifth annual report of the president and directors of the Baltimore and Ohio Rail-road Company. This road will soon be completed, and makes, as our readers well know, one of the most important rail-way connections between Cincinnati and the Atlantic cities. At this end of the line, the Cincinnati and Marietta rail-way will make the main Ohio link. Controversies have arisen as to the proper point of termination on the Ohio, and in regard to some local interests; but whether the junction be effected at Belpre, Marietta, or even Wheeling, by this great work, the distance from Cincinnati to Baltimore will be much shortened. By rail-way distance it will be (even through Wheeling) but 600 miles, which, in a continuous line, may be run in twenty-four hours.

The present condition of the Cincinnati and Marietta line is such that we feel assured, that in about two years the entire line from Cincinnati to Baltimore will be completed. From Blanchester, in Clinton county, (a point on the Hillsboro' road,) to Chillicothe, and thence to the Coal Banks, on the western side of Vinton county, (comprising about seventy miles,) the line of the Cincinnati and Marietta road is under contract. The engineering parties of the company are now surveying the route from Athens to Marietta; so that the whole line will soon be prepared.

The report of the Baltimore Company is equally satisfactory. Cars are now running west beyond the Youghiogheny River—being fifty-five miles west of Cumberland. Mr. Latrobe, chief engineer, expects to reach Tagart's Valley River Bridge (one hundred and three and a half miles west of Cumberland) by the 1st of March next, and Wheeling by the end of 1852. This is rapid construction. On the northwestern road, (chartered from the Three Forks to Parkersburg,) three parties of engineers are now engaged surveying. The city of Baltimore and the Baltimore and Ohio Company pledge themselves, in their publications, to make the work. If so, they can easily make their connection with the Cincinnati and Marietta rail-way from Belpre.

It thus appears that this really gigantic enterprise—a rail-way through the centre of the United States, crossing the Apalachian chain of mountains over ridges two thousand six hundred feet in height, crossing the Ohio river, and finally attaining Cincinnati, in the central West—approaches its completion. The entire work from Baltimore to Cincinnati, (six hundred miles, if it go through Wheeling,) will cost *twenty millions of dollars*, and will yield gross receipts of more than *four millions per annum*, at least. This will be a less cost, at least, than the New-York and Erie, which was twenty-one millions for four hundred and sixty-three miles.

The traffic on the Baltimore rail-way shows some extraordinary results, when we consider the original theory of rail-way commerce. Up to 1836, and indeed, 1840, engineers, merchants, and capitalists, considered rail-ways incompetent to the transportation profitably of very heavy articles. Yet here is the Baltimore road making its profits out of the very heaviest traffic which can be put on any road: here is coal, iron and flour carried in enormous quantities. We

quote below the comparative traffic in certain articles for 1845 and 1850. The comparison shows a rapid and extraordinary increase:

	1845.	1850.
Flour	225,600 bbls.	471,872 bbls.
Live stock	5,172 head.	14,553 head.
Coal	16,021 tons.	139,110 tons.
Iron	4,810 tons.	10,956 tons.

These are articles carried eastwardly to Baltimore. Flour has doubled, live stock trebled, coal increased eight-fold, and iron doubled. All this in five years!

The table of passengers shows some results which are of great value in exhibiting the real sources of rail-way revenue. Thus:

Total number of passengers	141,761
Total number of through passengers	23,498
Leaving way passengers	118,263

It thus appears that on a long line of rail road, the way passengers are 4 to 1 over the through passengers. They are, therefore, far the greatest source of revenue from passengers. The annual reports of the Baltimore and Ohio Rail-road Company are of great interest in exhibiting the influence of rail-roads in the development of the country and the growth of cities, as well as the value of rail-road stock.

4.—MISSISSIPPI AND ALABAMA RAIL-ROAD.

We have the report of the President of this Company. The road will reach from Selma to Union Town, and it is thought that 260,000 dollars will finish it, exclusively of the working stock, which may be procured on the mortgage of the road, or by leasing it out to the Selma and Tennessee River Company. The President has the assurance that this $260,000 is already provided for, (including the 2 per cent. fund,) and remarks upon the work:

Suppose the road from Union Town to Selma, a distance of thirty miles, cost three hundred and fifty thousand dollars—and this estimate any one, at all acquainted with the character of the country between those points, will admit to be exceedingly liberal. Now, by certain arrangements with a line of boats, cotton can be delivered in Mobile for one dollar and a quarter per bale—the same which it now costs after being hauled to the river. This arrangement will induce, almost compel, all planters in striking distance of the road, to give it patronage, and will, therefore, secure to it at least forty thousand bales of cotton. This estimate is thought by many persons too low. This amount, however, at sixty-two and a half cents per bale, leaving an equal sum for the boats, will give twenty-five thousand dollars. All persons, at all informed on the subject, concur in representing the up freight as in excess of the down freight. On this road it will certainly be largely in excess; for every fall, goods for a large scope of country, situate on both sides of the Warrior and Upper Bigbee rivers, are landed at Selma, Cahaba, or some other point on the Alabama river. This course of trade results from the uncertain character of the Warrior and Bigbee rivers, and all these goods would necessarily pass over this road, consequently giving it a large amount of up freight for parts of the country whence it would receive no down freight. This is not speculation, but will be readily appreciated by the least visionary understanding. Then we are justified, in view of these facts, in estimating the up freight at thirty-five thousand dollars—mails and passengers at fifteen thousand dollars. This is thought by well informed persons to be entirely reasonable. Stocks, mules, &c., &c., at five thousand dollars. These items make eighty thousand dollars. Forty per cent. is generally deducted for expenses; but to be liberal, we will deduct fifty per cent., and the balance will show a dividend of near 11¼ per cent. on the supposed cost.

5.—MONTGOMERY AND MOBILE RAIL-ROAD

A writer in the "Daily Advertiser" urges the extension of the Montgomery and West Point Rail-road westward by Selma, Union Town, and across the Bigbee to the Mobile and Ohio Rail-road, He says:

"New-Orleans is vitally interested in the accomplishment of this line as a means of direct communication with the North—as a highway for the travel, and as a means of connecting herself more closely with the southern interior. Neither of the other roads can so effectually accomplish this object as the one proposed. And as she takes an interest in the Memphis and Chattanooga, and the Girard and Mobile Rail-roads, as she should do, she will, of course, feel more in this, for by it she can, by a short road to Jackson, put herself in connection with the entire system of rail-roads of the United States. But Mobile is more deeply interested than any of these points, and I might, without exaggeration, say, than all of them. Complete this line and the Selma and Tennessee road, and only one hundred and twenty miles of the Mobile and Ohio road, and she is in connection by rail-way, with almost every other important point in the United States. She thus draws the travel and mail over the part of the Mobile and Ohio road completed. By these roads she develops the best cotton-growing region of Alabama and Eastern Mississippi, and the grain and mineral regions of our own state. She will then be no longer dependent on river navigation for her supplies of cotton or provisions; by this means she can be supplied at all times with provisions, without waiting for the Ohio either to rise or thaw, and must then have an advantage over her competitors in that trade. She would no longer be dependent on the rise of the rivers for a supply of cotton, for by means of these roads, her market would be kept regularly supplied—sufficient for the demand. Then, I am inclined to think, we would hear no more of the over-supply by the rise in the Warrior and Bigbee; no more of the, as at present, certain and inevitable decline in the price of cotton whenever the cotton from the Warrior and Bigbee arrives. Then Mobile could commence business with the cotton season as soon as other cities commence, and could and would have a supply equal to the demand, whether the rivers were up or down. Accomplish this, and I venture the prediction, we hear nothing more of Mobile being inferior, as a coiton market, to any southern city. In my opinion, she will then be able to compete with her rivals in all these respects. Supply Mobile with constant, certain and direct means of transportation to and from the country upon which she depends for her trade and support, and all the other obstacles in her way are little to be feared.

6.—LOUISIANA AND TEXAS RAIL-ROAD.

Col. Mills, of Texas, when in New-Orleans, a short time since, addressed the Executive Committee of the Opelousas Rail-road as follows: (It will be seen that Col. Mills would have the road penetrate Texas just exactly where we said it ought to, and for saying which, certain persons in Opelousas and New-Orleans undertook to read us a lesson, to wit: 32° 30, or in the vicinity of Shreveport.

You ask, gentlemen, what are the views and feelings, and intentions of Texas in regard to this rail-road enterprise? Let me inform you, that by extending a road, connected with a road from this place, westward into our interior,—crossing the Sabine, Trinity, and Brazos rivers, above the point of navigation, for even three hundred miles, and pointing still west, on the parallel of 32, or 32 30, towards the Pacific,—we would develop a country, in point of area, soil, climate, and production, unsurpassed by any section of country in the United States; the land universally good, producing twenty-five to seventy-five bushels of corn per acre, thirty to forty bushels of wheat, and 1200 to 2500 bales of cotton; and a large portion of it one of the finest stock countries in the world. This part of Texas is rapidly settling up, and were there rail-road facilities to this place, would speedily pour into your storehouses from 300,000 to 500,000 bales of cotton, or an amount of flour, pork, beef, and mutton, that is incalculable.

You ask what are our means of constructing a road in our own limits? I answer, we have several alternatives. In the first place, the landholders on the

route could build the road by a donation of land. As interest is the mainspring of action, let us look at this mode of raising means practically. The land upon the whole contemplated route of the road, after passing thirty or forty miles from Red River, is not selling at over one dollar per acre, unimproved. You apply to Mr. A., who owns one thousand acres near the route, for a subscription; he can readily say, I will give five hundred acres of my land to accomplish the road, knowing that the remaining five hundred acres would be worth from $10 to $20 per acre, and thus render his possessions tenfold more valuable, besides the advantages of an easy communication with one of the best markets of the world, to vend his produce or furnish his supplies.

Secondly, Texas has, after the discharge of her debts, a surplus of from three to five million dollars. From what knowledge I have of the views of our politicians of all parties, it will be deemed the policy of Texas to lay out this fund in internal improvements.

And lastly, I learn that many of the bondholders of Texas would willingly take stock in rail-roads to the amount of the debts due them.

7.—PLANK-ROADS.

Plank-roads are a new feature. It appears that the first plank-road in Canada was laid down in 1836, and in New-York in 1837, but it is only within the last four years that they have been much prosecuted. There now exists, of plank-roads in operation, as follows:

	Miles.	Cost per mile.	Total cost.
Canada	442	$1,750	$ 773,500
New-York	2,106	1,833	3,860,298

Very nearly four millions of dollars have been expended in New-York upon these roads, and the resulting advantages are immense. The roads have all been subscribed for by individuals, and all pay handsome dividends. For instance: the Troy and Lansingburgh road pays 10 per cent., semi-annual; the Utica and Burlington, 20 per cent.; and we believe none in operation pay less than 10 per cent., and none of the stocks can be bought in the market.

The importance of plank-roads in farming regions, becomes self-evident when it is stated, that on the Salina road a two horse team drew six tons of iron twelve miles, without unusual strain. Four and a half tons is an ordinary load, and a team will travel with it eight hours per day, four miles an hour, day after day. A farmer, in a heavy country, stated that the tolls paid saved themselves in the labor of cleaning horses. In all locations where these roads are in operation, land rises greatly in value. On the Salina road farm-land rose from $9 to $15 per acre; on the Syracuse road the increase was $10 per acre. It will be observed that an amount of property equal to $4,000,000, bearing a high rate of interest, has been created, and that that property has added, in addition, several millions to the value of the land through which it runs, and that all this property is mere saving from the old cost of transportation.

8.—RAIL-ROADS IN 1811.

The Philadelphia Ledger publishes the following letter recently communicated to the National Era. It was written by Robert R. Livingston, a great man in his day, and at one time Chancellor of the State of New-York. It may excite a smile in a reader of the present time, who knows what a rail-road is, but objections to great projects are now raised equally as absurd:

ALBANY, *March* 11, 1811.

Dear Sir,—I did not till yesterday receive yours of the 25th of February: where it has loitered on the road, I am at a loss to say. I had before read of your very ingenious propositions as to the rail-way communication. I fear, however, on mature reflection, that they will be liable to serious objection, and ultimately more expensive than a canal. They must be double, so as to prevent the danger of two such heavy bodies meeting. The walls on which they are placed must be at least four feet below the surface, and three above, and must be clamped with iron, and even then would hardly sustain so heavy a weight as

you propose moving at the rate of four miles an hour on wheels. As to wood, it would not last a week. They must be covered with iron, and that, too, very thick and strong. The means of stopping these heavy carriages, without *great shock*, and of preventing them from running upon each other—for there would be many running on the road at once—would be very difficult. In case of accidents, stops, or the necessary steps to take wood and water, &c., many accidents would happen. The carriage for condensing water would be very troublesome. Upon the whole, I fear the expense would be much greater than that of canals, without being so convenient.

R. R. LIVINGSTON.

9.—THE GREAT PACIFIC RAIL-ROAD.

Mr. Whitney's indomitable perseverance is deserving of all success. Hannibal when he crossed the Alps, or the Czar Peter when he raised Russia to a first class power, did not display more. We favor a road to the Pacific—believe it to be practicable—and would adopt any plan to secure it which seems likely to be speediest of accomplishment. The work is adequate to the resources of the whole nation, but not beyond them, and should be determined by geographical considerations and surveys as to all questions of routes, etc.

The bill which is now before Congress for Mr. Whitney's work, contains a clause, setting apart a strip of public lands sixty miles wide, running to the Pacific from a point on the Mississippi, *not* north of Memphis, by the Rio Del Norte and the Valley of the Gila, to be granted to any person or company who, within two years after the grant of the northern route to Mr. Whitney, shall undertake to construct a southern route through Arkansas and Texas, etc.

Mr. Whitney has addressed us the following note on the subject:

J. D. B. DE BOW, Esq.,

I have taken the liberty to enclose a slip from the Journal of Commerce, containing a copy of my address before the Royal Geographical Society of London, and my letter to the editor, which letter will show you the position of my affair in England at this time. I also enclosed a copy of the bill, which has been reported to both Houses of Congress, at the close; you will notice a proposed new section, which would have been added had the bill been taken up for action at the last session. This new section met the approbation of Southwestern members. The bill has not been published in any papers to my knowledge, and if you have room it might do good to publish the bill in your next number. This new section will give to the South the same chance as to the North to get a road, provided the lands will furnish the means to build it; and few, indeed, if any, can expect to see a road to the Pacific built from any other source of means.

You will see from my letter to the Journal of Commerce what will be my course of action, that is, to quietly await the action of Congress. I now feel that I have done all that I can do, and all that should be expected from me. It is admitted everywhere that my plan is the only feasible one; and if Congress do not act promptly, I shall believe that the hope of getting a road to the Pacific across our territory is abandoned. Be pleased to write me and give me your views.

Sincerely yours,

ASA WHITNEY.

MESSRS. EDITORS:—While on my recent visit to London, I found that the project which I have made the object of my life, was made the subject of universal interest, as well by the Press as with the people. It was discussed and thoroughly examined in all directions, and by all classes, and in the short space of three months it became fully known and correctly appreciated throughout the Kingdom. It was looked upon as a work, not for a nation, or for a people, but as a work for the world; one in which the whole human family are deeply interested,—a work which the present position of mankind demands as a means to give employment, homes and comforts, to the surplus of population which are now destitute, and burdensome to their fellow-man. The subject excited but little national jealousy,

nor was I anywhere treated as a foreigner or as a stranger, but all seemed willing and anxious to encourage and aid me on with the heavy load that I have borne alone, for so many years; and one and all have decided that the road must be built, but cannot be accomplished on any other plan than the one which I have proposed. Capitalists, business men, the people and the press, have declared their full confidence *only* in my plan, and have nobly declared their determination to sustain me in it. The Morning Chronicle, after commenting upon the subject fully, says: "Nothing must be done to deprive unfairly or ungenerously Mr. Whitney and the United States of the full benefit and credit of this great and sagacious undertaking." The Times has spoken equally decided. The Sun, which had expressed very strong views of a road across the British North American territory, in preference to the route which I had proposed through the United States territory, on the 24th June, adopts my views fully, and says: "Opportunities will very shortly, no doubt, present themselves to us for the further explanation of the masterly scheme by which Mr. Whitney proposes to carry out a railroad between the Pacific and Atlantic. Upon the present occasion we can only aver with earnestness, and at the same time with all deliberation, that the plan submitted to the public by this intelligent and enterprising citizen of the United States, appears to us to be the only one capable of developing the project to its completion, in the future railway across North America, carried through the United States or through British territories." The Globe and other papers have expressed similar views.

Capitalists are ready to furnish the necessary amount of means to commence and carry out the work through the United States territory, provided the bill is made a law by Congress whilst the lands remain unoccupied and available; and so soon as it is decided that the lands are no longer available on the United States territory, then the necessary capital and lands will be furnished to carry out the work on the British territory.

Everywhere a strong desire for examination and warm interest was manifested in the subject, from the crown ministers to all classes, and in no instance was there an opposition to it, after a fair examination. On the contrary, it met with universal favor and warm approbation.

I was invited by the president, Sir Roderick Murchison, and the secretary, Dr. Norton Shaw, to attend the annual meeting of the Royal Geographical Society, for the purpose of explaining my project. [Herewith be pleased to receive a copy of my address delivered before a large meeting of the members of that society, which took place at King's College, on the evening of June 9th.] To many persons present the subject was new, and its magnitude, with the important results to be produced by it, startled some, and caused a disposition on the part of a very few to oppose it; but there appeared a very decided majority in its favor. It was sustained by several strong arguments, and especially so by Sir Roderick Murchison, who entered fully into the subject. Among the few who seemed disposed to oppose, were Robert Stephenson, M. P., the justly celebrated engineer, and Capt. Fitzroy, the great navigator. Mr. Stephenson, however, sustained the views and positions I had taken, in relation to a commercial route between Europe and Asia, across the Isthmus of Mexico or of Suez. He said: "The construction of a railway across Suez, to save time for mails and passengers, was a feasible project, and deserving of the attention of England; but with regard to the opening of a canal, supposing the facilities to be so great, and that in fact the money question was as much sunk as Mr. Whitney supposed it to be sunk as regarded his project, he (Mr. Stephenson) believed that if a canal were made, the commerce between England and India would not then go by the Mediterranean and the Red Sea. In fact, he thought if the Isthmus of Suez were swept from the face of the globe, as Mr. Whitney supposed the Isthmus of Panama to be, that still the commerce of the world would not pass through it."

To these two highly distinguished gentlemen I am particularly indebted. After this they devoted much time to the examination of the subject, and changed the views entertained at the meeting of the Royal Geographical Society, and became my warm supporters. Immediately after this meeting, Sir Roderick Murchison made an arrangement to have my project brought before the British Association, which convened at Ipswich the first week in July. Prince Albert was present, and my project was selected by himself to be heard, as one of the leading subjects before the association. Captain Fitzroy, who had opposed me

in London, was called upon, after I had completed my address, and made a strong and eloquent speech in my favor. After explaining fully his views, he said: "Mr. Whitney's views startled most persons at first, in the United States as well as in this country; but he has patiently reasoned with his opponents, and has shown such good grounds for his views and anticipations, that almost all his adversaries have admitted their soundness, and now consider that his plan is not only feasible, but deserving of full encouragement;" and he says, "It is to be regretted that the American Congress have not taken active steps in forwarding the truly gigantic enterprise, before the tide of settlement has made such progress westward as actually to be now an impediment to the plan in its simplicity.

"As Mr. Whitney's object is not only to connect distant continents, but to afford employment to hundreds of thousands—to millions of those who are destitute of even the necessaries of life, and are unable to obtain work by which to maintain themselves, it may well be hoped that he will be encouraged to go on and prosper in an enterprise so eminently calculated to be beneficial to all the world."

Mr. Stephenson, who was unable to attend the meeting of the association, gave me a letter, authorizing me to use his name, if necessary, in support of the feasibility of my plan. My views were sustained by many distinguished gentlemen of science, as also by practical engineers, to whom I must ever feel greatly indebted, and shall remember them with the greatest pleasure and deepest interest. My address, or explanations, before the British Association, was selected by a committee, and ordered to be printed with their annual publication.

It remains now for the coming session of Congress to decide if this great work shall be carried out on ours, or on British territory. I have pledged myself to my country that I can accomplish this vast undertaking, which will secure to us forever the control over the commerce of the world, and will devote my life to it. The people almost with one accord have accepted that pledge, and urged me on; but Congress withheld the necessary permission. With that permission I am ready to, and will redeem my pledge. Congress must now decide the question. It is my desire that action may be had upon the bill. If against it, then I am absolved and free to follow the course which duty will then so plainly point out.

Respectfully yours,

ASA WHITNEY.

10.—MEMPHIS AND CHARLESTON RAIL-ROAD.

J. W. Clapp, of Holly Springs, has published a very able letter upon the dispute growing out of the location of the above road. It will be observed, that the Legislature of Mississippi is soon to be called upon to alter the charter of the company, so as to admit of a route which shall leave Holly Springs considerably to the southward. Mr. Clapp argues against such a change at great length, but we have only room for one extract, in which he meets the question of reciprocity with Tennessee. We think that Mr. Clapp *narrows* it in supposing the interests of Mississippi require nothing beyond a junction between the Jackson and Holly Springs, and Memphis and Charleston roads:

The second cause which, as I remarked, it was supposed would exert an influence upon our Legislature in effecting a change in the present charter, was the extension of the Jackson and Holly Springs road through the State of Tennessee to the Ohio River. The Legislature of Tennessee, it is said, will refuse to grant us a charter for this purpose, unless we manifest liberality enough to remove the obstruction thrown in the way of the Memphis and Charleston Company by the terms of the present charter, and this consideration will induce members of our Legislature from the counties interested in the Jackson and Holly Springs road to vote for a change of the charter. I have taken some pains to ascertain the state of feeling upon this subject, and think the difficulty suggested may be disposed of in a few words. Mississippi neither expects nor desires to extend this road through Tennessee at the expense of our people.—When the Jackson and Holly Springs road is made to connect with the Memphis and Charleston road, all has been accomplished that the citizens of our state have any particular interest in. We thus tap the Mississippi river at Memphis, and open up a communication with the Atlantic seaboard. If the people of Tennessee wish to continue this road through their state to the Ohio River, it is for them and not for us to adopt the steps or secure the means necessary to accomplish this result. That this will be the view of the matter which the counties south of us will take, I have every

reason to believe, from the information I have upon the subject. If the charter of the Memphis and Charleston road is not changed, and the road is built pursuant to the present requirement of that charter, this, as I above remarked, will secure the junction of the two roads within our own state, and thereby render both of them of great value to us.

11.—MOBILE AND OHIO RAIL-ROAD.

Sidney Smith, of Mobile, President of the company, has lately put forth a report, from which we extract the following valuable information in regard to the road:

It is well known that in 1849 this road was located 70 miles from Mobile to the Buckatunna River, 9¾ miles within the State of Mississippi.

During the present year a thorough re-survey of the whole of Eastern Mississippi, south of Tishamingo county, and careful re-estimates of the cost of constructing the road have been made; also, a very considerable amount of stock subscribed in Mississippi, between Lauderdale and Chickasaw counties, inclusive.

From all the facts thus furnished the Board of Directors, they have unanimously adopted the following described line, as the permanent and final location of this part of the Mobile and Ohio Rail-way, to wit: From the Buckatunna River, where terminated that portion of the road previously located, the route passes up the Chickasawhay River valley near Winchester, Quitman and Enterprise, to the mouth of Sowashee Creek; up the valley of which it passes a northeasterly course to and across the dividing ridge between the waters of Chickasawhay and Bigby Rivers; thence it passes down the slope of Possum Creek, one mile west of Lauderdale Springs: crosses the Sucarnochee River just below the mouth of Patickfau Creek; leaves Narkeeta Bridge one mile to the west, and thence pursuing a northerly and northwesterly course, passes half a mile west of Macon, via Prairie Grove Church, Lodi, Black Jack Mound, and Okalona, and terminates, for the present, at the north line of Chickasaw county, whence its extension through Pontotoc, Itawamba and Tishamingo counties will be published as soon as the surveys beyond are completed into Tennessee; and the people north of Chickasaw and Monroe counties show, by their subscriptions of stock and releases of right of way, that they are ready to do their part, or what they reasonably can, in the work of construction—which is the local work of preparing the roadway and timber for the iron rails.

The counties through which the road, thus far located in Mississippi, and its position and length in them, respectively, are as follows:

In Wayne County,	centrally	34	miles.
" Clarke "	through westerly half	23	3–5 "
" Lauderdale "	centrally	34	2–3 "
" Kemper "	easterly half	26	1–5 "
" Noxubee "	centrally	26	1–7 "
" Lowndes "	western side	26	1–5 "
" Monroe "	southwestern part	17	1–5 "
" Chickasaw "	northeastern	12	2–3 "
Total		205	2–3 "

The continuation of the location through Pontotoc, Itawamba and Tishamingo counties, will be 67 1-3 miles further to the Tennessee line, making the entire length of the road in the State of Mississippi 273 miles, exclusive of the branch to the Tennessee River. The length from Mobile, now definitely settled, is 267 miles—33 of which are nearly finished, embracing the purchase of extensive depot grounds, and wharf rights at Mobile sufficient for the whole road when completed to the Ohio River. From this it will be seen that 234 miles more of the route north of Citronelle are now ready for gradation, and will be placed under contract as soon as sufficient means shall be subscribed to complete the same. The amount of capital in money and labor required for this portion of the road is shown by the following estimate of its cost, which has been prepared from the data furnished by the final surveys of the route adopted:

For the local work of clearing, grubbing, masonry, grading, bridging, station buildings, timber and laying of the track	$2,236,576
For Iron Rails (65 lbs. per yard) chairs, spikes, switches, engines, cars, and repair-shop machinery	2,074,800
Total	$4,311,376

Or an average of $18,261 per mile.

* * * * * * * * *

From these statements, it will be seen that the 2 per cent. law for Mobile, and a further subscription of $328,000 in Mississippi, south of Pontotoc county, will secure the immediate commencement of 234 miles more of the road. And by the time this can be put under contract, the final surveys will be completed, road located, and the stock for the local work subscribed for through the States of Tennessee and Kentucky, to the mouth of the Ohio River.

Active operations will be commenced in Tennessee during the present month; and it is confidently expected that the agents and friends of the road everywhere, learning by this communication how the means can be acquired to build all parts of the road, will use all possible diligence in completing the local subscriptions to the amount of the local work, and will report the same, county by county, to the office of the Company at Mobile.

SIDNEY SMITH, *President*
Mobile and Ohio Rail-Road Co.

Mobile, Oct. 6th, 1851.

MISCELLANEOUS DEPARTMENT.

1.—GROWTH OF TEXAS.

MUCH has already been written upon the growth and prosperity of this flourishing state. Texas is no doubt destined, in the popular language of the day, to become the "Empire State of the South." When her present debt shall have been extinguished, as it speedily will be, I hope, to the satisfaction of all her creditors, and the balance of the ten millions appropriated to internal improvements, rail-roads, the clearing out of her rivers and harbors, and the purposes of education,—for which last, by the way, the state has already funded nearly a million of dollars,—her resources will begin to be rapidly developed.

Texas is almost the only state in the Union having a diversity of soil and climate suited to the various products of our wide-spread country. Embracing in her territorial limits an area of several hundred thousand square miles, with several degrees of latitude and longitude, we find her producing, in one district, all the grains and fruits of the North, and in another, all the staples of the South, and the luxuries of the tropics. Cotton, tobacco, wheat, corn, rye, oats, potatoes, &c., in the northern range, and Red river district, of the 31st degree of latitude and upwards,—and sugar, cotton, tobacco, rice, and all the tropical fruits farther South.

At the battle of San Jacinto, Texas scarcely numbered ten thousand souls; she now has nearly *three hundred thousand*. She has upwards of one hundred organized counties, and is well supplied with newspapers and post-offices throughout the state. An intelligent traveler, who has made a recent tour to the Upper Trinity, "represents the emigration to that part of the country as far exceeding anything he had imagined. This immense influx of immigrants had produced the natural consequence of giving an unusual demand for provisions, and enhancing the value of land to an extent that is almost unprecedented. Lands which were offered last year for three or four dollars per acre, can now be sold readily for eight or ten; and such as could be had ten months ago for fifty cents per acre, can now be sold for two dollars in cash."

The Brazos plantations have been gathering a bale of cotton per acre, at the first picking, but since the heavy rains, the yield is much less. The sugar crop is, this year, very fine. Cotton and sugar will be much earlier to market than usual.

The city of Galveston, the island city, the chief commercial mart of the state, has a population of about 4,000 souls. She commands, at present, two-thirds of the

gulf trade. Besides regular lines of steam packets to New-Orleans, she has a line of superior sailing packets to New-York and Boston, and it is in contemplation to add a line of steamers to New-York and Mobile. Ten emigrant ships are daily expected here, on their way from Europe, with passengers and freight for Texas.

The domestic trade of Galveston, chiefly up the Trinity and Brazos rivers, for the past year, may be safely set down between two and three millions of dollars. In the course of another year or two, she will ship from this port eighty or a hundred thousand bales of cotton, equal to Natchez and Vicksburg in their palmiest days. Galveston is pretty well built for a new town, though it has nothing to boast of in the way of architecture, unless it be the cathedral, which might be regarded as an ornament in any city. "The log cabin era in Texas has nearly passed by, and people in the settlements and villages have fairly entered upon a style of architecture which may well be termed the *barn* style."

The past summer has been the hottest, dryest, and healthiest ever known. With the exception of two or three showers of rain, providentially sent, it would seem, to keep the cisterns well filled, and supply the inhabitants with water, so indispensable to health and comfort, we may say, in the language of the Scripture, that "the heavens have been brass, the earth iron, and the rain of our land powder and dust." Notwithstanding the thermometer has ranged from 80 to 9 and upwards, all the season, and indicated the *same degree* of temperature nearly at the *same hours* of the day and night, for weeks and months together, we have continually been refreshed by cool, southerly and westerly breezes from the Gulf, and blessed with a degree of health unequalled, we dare assert, by no other town or city of its size in the United States. For five months past or more, the sun and moon have never been shorn of their brightness, and such nights as have beamed upon us continually during the summer, have nowhere else been realized this side of the Grecian Isles.

2.—RESOURCES OF SOUTH FLORIDA.

I wish to direct your attention to all that part of Florida south of the line of frost, but particularly to the Manatee River and its advantages; and I shall give you a description of its climate, its lands, and its productions.

The soil generally is poor pine land, but it is not of that we boast; it is of our wonderful climate, whose genial influence exerts itself alike on animal and vegetable nature. The heat is sufficient to stimulate a rapid and luxuriant growth, while it is never so intense as to become disagreeable. The thermometer rises to ninety-two, perhaps not four times a year. As it is not extreme in its variations of temperature, neither is it rapid in the succession of those variations, but always maintains that equality and dryness of climate so grateful to the northern invalid. I believe it is the healthiest climate in the world. Our northers are less bleak than on the eastern coast, as they are warmed by the radiation of the whole peninsular over which they must pass to reach us. Our winter months are truly delightful; we are just south of the line of frost, and the cold, not enough to injure the most delicate flower, is yet of sufficient intensity to invigorate us and enable us to recuperate from the relaxing effects of a continuous but not severe summer. It is the most favorable climate for pulmonary invalids on the Western continent—instances have occurred where they have been afraid to leave here; I myself am one, and I intend locating here on that account. On examining the dead list, I find the only diseases to be old age, and the consumption, the last being an exotic and not indigenous here.

Many invaluable plants thrive luxuriantly here, even in the poorest soil. The Sisal or Manilla hemp grows on despite of drought, overflow, fire, and even a slight frost; in three years you may cut it, and even with the present instrument for cleaning it, you may gross $600 to the hand and to the acre. You may dig hundreds of bushels of cumpti from the poorest acre, without exhausting it; for the root is pure starch, composed of no minerals, except carbon, and the top, returned to the soil, repays with generous interest the draft upon it during the last year. Sow the seed once, and you have it forever. The castor oil plant here is perennial, growing wild, a tree twenty feet high, and producing one hundred and fifty bushels to the acre. It will always remunerate cultivation, even if sold for lamp oil, and burned for light.

To the settler a thousand unexpected sources of gratification start up. He may eat here his own oranges, olives, bananas, and pine apples; he may fringe

his yard with an edging of his own cocoa trees; he may inhale at once the perfume of the lemon and the jasmine; he may sit under the shade of his oleander and crape-myrtle trees, or he may sleep there, fanned by the gentle winds, and lulled to rest by the music of the mocking bird.

The resources of this part of Florida are very great. Along the river is destined to become a vast orange and lime orchard: the bug is actually disappearing; all the trees that were once infested by them, are now clear, and are green and luxuriant.

As a grazing country, it is remarkably fine, and the pastures are green the whole year. We have a grass here that grows with such wonderful luxuriance, as to feed ten head of cattle to the acre—the Guinea grass. No soil is too poor to raise it, and once in possession of the ground, you may cut it monthly, for a long succession of years.

Pooh! says Mr. Wiseacre, all this is fudge. I've been there. Why, sir, the lands are low and flat. So much the better, sir; they won't wash; but they are sandy; we can only work them the easier, and with better health, sir. But they won't produce oats and corn; we do not need them in a land of eternal pastures. You have no springs; true, but we have cisterns of the healthiest and sweetest water in the world. You are sickly. It is false: I appeal to the thousands who flock to the plains of Florida to find new life in her soft winds and softer sky; I appeal to her sons, born and raised upon her bosom, whose manly forms and pliant vigor tell other tales than of disease. But there's no doubt about it, sir! your lands are miserably poor. In one sense of the word, I grant it; in another, I deny it. The land is rich in its adaptation to the climate, as best suited to the peculiar vegetation which the climate grows.

There's not an acre in the broad soil of Florida that will not yield a rich return in something. They take but a narrow view of the economy of nature who will call land poor because it won't yield corn. Fertility of the soil is a relative term. Every soil is fertile that has its uses. Florida poor, with its turpentine to pay six hundred dollars to the hand! Poor! with its oak, to rib the sides of a million of ships! Poor! with its cotton, rice, and cane plantations! with its arrow-root, its tobacco, its hemp, its fruits, its herds, and its fisheries! with a seacoast equal to any three states in the Union! with broad and deep rivers, running through all its length and breadth, and with a variety of climate sufficient to unite the temperate and torrid zones! The charge is absurd, and yet that very charge has been the cause of the neglect of Florida. People found sandy barrens, and the staples they would have raised, died; the real staples of the country they knew not, and, consequently, never tried. Disgusted, they returned home, and the report went forth of the poverty of Florida.

Our cane lands are equal to any in the world, while their position in a tropical climate gives them a value above any other in the United States. They are hammock lands whose rich top soil finds a foundation in a bed of marl, averaging about twenty inches under the surface. Dr. B., a planter here, has cane that has been ratooning seven years, and if not better, is equally as good now as it was in its third year. Unimproved, the land is selling at ten dollars per acre. Its location upon a river of easy navigation and deep bar, (ten feet at low water,) and its access to New-Orleans, perhaps enhancing its value. There is land enough in the immediate vicinity for thirty plantations of about two hundred acres, each yielding a hogshead and a half to the acre.

But it is not of our rich lands that I should speak; there's emulation enough after them; the poor man has no chance there. I would invite his attention to the poor lands, and teach him to trust to the climate for what he found wanting in the soil. I would teach him that there are valuable staples peculiarly adapted to that very soil. I would tell him how he could profitably plant his eighty acre tract in oranges, limes, manilla hemp, and castor beans; how a single acre of Guinea grass would afford perpetual food for his team of two horses or mules, and six or seven milch cows; how a fish and a turtle pen and an oyster bank would afford him and his single slave nutritious food for the whole year; and how easily his meat-house could be filled with venison and beef. I would tell him that prosperity must follow a settlement here, for God has blessed the land, and He will bless the people. Your ob't serv't, J. R. L.

Manatee, Fla., Aug. 3, 1851. [*Soil of the South.*

GALLERY OF INDUSTRY AND ENTERPRISE.

EDWARD BATES, OF MISSOURI.

WITH A PORTRAIT.

No. 12.

We have now to speak of one of the most distinguished and useful citizens of Missouri—a man who has been active in the cause of western progress and improvement—who presided over the deliberations of an important convention held in the northwest for their promotion, and who, for his high and liberal views, enjoys a reputation in this particular second to no one on this side of the mountains.

Edward Bates was born in Goochland County, Virginia, Sept. 4, 1793, of the plain quaker stock, which for several centuries dwelt in the low country, between James and York rivers. His ancestors came from the west of England to the Jamestown settlement, the first of them, in or before the year 1625; and their descendants, with a few exceptions, remained in that region till the time of the Revolution, when many of the younger men—his father and several uncles included—took arms against the king, and they thus forfeited their membership in the "Society of Friends."

They were plain people, of the middle rank as to property and education, and were, for the most part, small planters and merchants. Being quakers, they intermarried chiefly with each other, seldom forming matrimonial connections out of the Society. And thus were founded several of the most numerous families in Virginia—*i. e.*, all that bear the names of Woodson and Pleasants, who are of those humble quakers of Jamestown.

Thomas Fleming Bates, the father of Edward, was a man of fair talents, methodical habits of business, and a good fund of practical information. He was bred to trade, in one of the best mercantile houses in the colony, and was several times sent abroad—to England, Spain, Portugal, and Madeira—as supercargo and purchasing agent. At the beginning of the Revolution, he thought he was in easy circumstances, closed his business in Henrico (or Charles City,) County, where he then lived, and settled on a new plantation on James River, in Goochland.

The general poverty of the times, and the depreciation of continental money, soon made his claims and book accounts of no value; and the British army (on its march to the Point of Fork) destroyed his plantation. But his British debts remained, and they sufficed to break him up, when peace was restored.

Though a quaker and a merchant, he was a sound whig and a brave man. When the British army was encamped upon his plantation, and the lower story of his house occupied as head quarters, for 24 hours, (the family being ordered up stairs,) he was called into the General's presence, and there, a written protection was handed to him by an aid-de-camp. He read it deliberately, thinking sorrowfully of his wife and six young children, folded it into a narrow strip, and thrust it among the burning coals, in a chafing dish which stood on the hearth, ready to make his Lordship's tea, confidently believing that he would be instantly arrested, and perhaps sent to a prison-ship. But Lord Cornwallis was a humane and magnanimous man, loathing the cause in which he was bound to fight. He said, with softened countenance, and in gentle tones, "Mr. Bates, would to God that you, and all such men as you, were loyal subjects."

A few months after, he was at the siege of York, a volunteer soldier in the ranks, under La Fayette, and witnessed the surrender of Lord Cornwallis and his army,

(Oct., 1781.) His son still retains the musket that he fought with on that occasion—still as good a deer gun as could be found. He died in May, 1805, leaving no estate but a widow, five daughters, and seven sons, Edward being the youngest of the twelve children.

Left an orphan under the age of twelve, and without a dollar, there was still no practical difficulty in his way, for his elder brothers were industrious and prosperous men, and generous with their means. One of them, Fleming Bates, of Northumberland, Va., took him as a son, and would have given him a thorough education, but for a bodily accident—the fracture of a leg bone—which stopped the regular course of his studies, and forced him to quit school. He had been for some time at Charlotte Hall Academy, Maryland, a very good school for boys who were anxious to learn, but a very poor one for those who required compulsion. There he attained a knowledge of the elements of mathematics, &c., and something of the Latin and French languages, with which stock he returned to his brother's house, to suffer a long and painful confinement of nearly two years.

His only resource was a good library, and writing materials, at discretion. He had no advice or assistance, no method prescribed, no sequent order of study. Deprived of all active employment, he fell upon the books, with a morbid and indiscriminate appetite, devouring everything that had the name of poetry, from Homer and Shakspeare down to Peter Pindar; and all manner of histories, from Weem's Revolutionary Worthies, up to Livy and Herodotus; and all the while scribbling, as with an itching quill. Thus, thoughts were rapidly engendered, and a mass of ideas accumulated, but, unfortunately, very crude, without any method or classification, and without stopping a moment to think about either taste or judgment.

In his boyhood he looked to an office in the navy as the business of his life; and his kinsman, James Pleasants, then the Representative of his native district, in the winter of 1811–12, procured for him the promise of a midshipman's warrant among the first appointments. His hopes were wrought up to ecstasy. It was the nick of time—we were looking for a war with England—his fortune was made—his fame won! We had nothing to do but meet the enemy, and (as Perry said afterwards) they were ours. But all these flickering glories were soon extinguished. His mother, though quite willing to see all her sons march to battle in any emergency of defensive war, was still too much of a quaker to be willing to see him follow arms as a profession, and depend for support and reputation upon strife and blood. She fairly cried him out of the cherished object of his young ambition, and he renounced the warrant.

The world being now before him, he soon determined upon the profession of the law, and to that end accepted the invitation of his brother Frederick, to go and settle in St. Louis; (Frederick was a protege of both Jefferson and Madison—was Secretary of the Territory of Missouri, from 1807 till the state was constituted, in 1820; and was the second Governor of the state, elected in 1824.) Just as he was getting ready to start to the west, in the winter of '12–13, a British fleet came into the Chesapeake, and troops were suddenly called for, to defend Norfolk. Happening to be in his native county, Goochland, he joined a company of volunteers, marched to Norfolk, and there ate the public rations for six months, rendering no particular service, unless it may be called such to have aided in digging several broad ditches, &c. He was a sergeant in Capt. Hopkins's company of infantry.

In the spring of 1814 he went to St. Louis, then a French village of some 2,000 people. He commenced the study of law, in the office of Rufus Easton, the best read lawyer at the bar, and for some time a delegate in Congress. He studied very diligently, working on the average, (6 days in the week,) 14 hours in the 24. In the winter of 1816–17, he took license, and commenced the practice of the profession.

In May, 1829, he married Julia D., fifth daughter of David Coulter, formerly of Columbia, S. Carolina. By her he has had fifteen children, eight of whom survive.

Mr. Bates has held several offices under the Territorial Government; Circuit (prosecuting) Attorney, under the State Government; Attorney-General, under the U. S. Government; and District Attorney for Missouri. He was a member, the youngest but one, of the Convention which formed the State Con-

stitution in 1820. He has served at different times in both branches of the State Legislature, and a single term in the U. S. House of Representatives, the 20th Congress.

His large family are still dependent upon his professional labor, and he has long ago declined to risk their comfort and his own independence upon the contingencies of political success. It is a pitiable spectacle to behold, even a good man staggering in the path of official duty, under the weight of his private affairs.

For more than 30 years, Mr. Bates has been an occasional writer for the newspaper press, chiefly on political subjects, and of those, for the most part, such as concerned the interpretation of the constitution.

Although he has been a public speaker for 33 years, there are no speeches of his in print. A few notes and sketches have been published, but he never wrote out a speech for the press. He has attempted it once or twice, upon solicitation, but never could satisfactorily recall, he thinks, the spirit that animated the oral delivery. Mr. Bates has acquired a large reputation in Missouri, as a ready and eloquent speaker. The Latin classic tells us that "*poeta nascitur non fit*," but we have small faith in the doctrine, though men do take it blindly for the truth, because it is flattering to their vanity to be supposed the peculiar objects of the Creator's bounty—to be naturally wiser, better, stronger, than other men. There is a much nearer approach to mental equality among men, than is generally supposed; and the actual differences, many and great as they are, may almost always be traced to adequate causes. Those faculties which are most cherished and cultivated, are always most prominent in action. They overshadow and conceal, and almost suppress their uncultivated associates. The *will*, that king faculty of our moral nature, left free from the control of other wills, may run headlong to ruin, but subjected to a wholesome, self-discipline, never fails to make its possessor a self-dependent man of purpose. He may fail to acquire the wisdom and virtue of others, and may abound in obliquities and follies of his own; but he is sure to be original. His virtues and vices are proper to himself, cognate to the predominant will, and characteristic of the man.

Mr. Bates's facility and power as a speaker, are the results, in his own opinion, only of the most diligent and unremitting labor. Many a French volume, (Fenelon, Condillac, St. Pierre, &c.,) he has read aloud in English, and many quires of paper disfigured with rapidly-written verses, (burned before the ink was dry,) as a mere exercise in the choice of phrases, for the expression of thoughts already formed. He had adopted a *speaking* profession, and looked to it as the only means by which he might hope to acquire support and reputation; and the course of study and practice which he pursued was such as seemed to him most promising of success.

In the 20th Congress, Mr. Bates opposed the occupation of Oregon, considering that country essentially foreign, and the occupation of it by the United States the entering wedge to a system of foreign colonization, conquest, and domination. Then we had no rail-roads, and telegraphs, which at this day have for many purposes annihilated both time and space. He was, from beginning to end, against the Mexican war, and against the acquisition of Mexican Territory, by either arms or money; and wrote several articles on those subjects in the St. Louis papers, none of which were extensively circulated in distant journals.

In a letter which we have lately had the pleasure of receiving from Mr. Bates, he remarks, and with this we close our brief and ill-digested memoir:

"Were it not proved by constant experience, that the currents of social life often drift men into courses quite opposite to those they attempt to steer, I should be astonished to find myself, in some sort, a public man, in spite of my efforts to the contrary. In youth I was ambitious, and sought distinction with some avidity. But the popular storm which blew General Jackson into the Presidency, blew me out of the track of public life. In the canvass for a second term in Congress, I was so thoroughly beaten, that I was content, as the Kentuckians say, to "stay whipped," and never again to worry myself with the attempt to climb the slippery heights of politics. Thenceforth, I looked only to professional labor, for the means of supporting and educating a numerous family, and to the domestic circle for all my enjoyments. A practice of more than twenty years on this scheme of life, has destroyed whatever of appetite I may once have had, for public distinction; and now, all I desire is, (I hope it is in my reach,) for my children, the means of education, and a fair start in life; and for myself, the quiet esteem of good men."

EDITORIAL AND LITERARY DEPARTMENT.

1.—COMMERCIAL MOVEMENTS IN VIRGINIA.

In our present number we publish the very able address of the Mercantile Convention, lately held in Richmond, Virginia. We have received since that was put into print the "Petition of the Central Southern Rights Association of Virginia, with accompanying documents." The Old Dominion seems to be in truth awake.

The petition contrasts the pristine and present state of the South:

"What was the situation of the Southern states at this important period of our history? They were wealthy, contented, prosperous, and happy. They could sit under their own vine and fig-tree, and none could make them afraid. Their voice was heard in the councils of the nation, and, although it was frequently disregarded, it was always treated with respect. We occupy the same soil; we inhale the same balmy atmosphere; we have the same domestic relations; we have all the energy of our fathers; yet how sad and degrading is our situation when contrasted with theirs. We are a divided, depressed and discontented people; our property is wantonly purloined; our feelings outraged, and our interests disregarded. With agricultural productions which should command the commerce of the world, we are dependent on the free states for the very necessaries of life. We have become a second Ireland. What has produced this deplorable change in our situation? It is the pernicious hand of government. No temporary cause; no trivial event; no accidental circumstance, could produce results so deleterious."

The association asks of the Legislature, the enaction of such *excise* laws, as may be fit and proper, discriminating in favor of such articles as are the growth, manufacture or direct importation of the state of Virginia. The constitutionality of such a measure they believe to be fully sustained by the decisions of the courts; and it was once advocated by Virginia's distinguished son, William B. Giles, when seeking for the means of retaliation upon the North.

"A permanent system of taxation upon the manufactures and imports of the Northern states, brought to Virginia for consumption, is recommended as the most certain means of securing, ultimately, her commercial independence of those states, and as the surest basis upon which to found our future hopes of safety and happiness. The vast sums of money employed in the Northern states, by numerous unlawful and fanatical combinations, constantly brought to bear upon the politics of those states, leave but little hope for the safety of our property, or our institutions, while dependent upon a people actively seeking their overthrow."

By the document annexed to the petition, we learn that as far back as 1769, Virginia imported in value over $4,000,000, whilst New-York did not import $1,000,000. In 1791, Virginia imported $2,486,000, and New-York, $3,022,000. Virginia exported $3,131,000, New-York, 2,505,000 at the same period.

Exports, Virginia.

In 1821,	exported	$3,077,210
In "	imported	1,078,490
In 1826,	exported	4,129,520
In "	imported	553,562
In 1830,	exported	4,791,644
In "	imported	405,739
In 1840,	exported	4,778,220
In "	imported	545,085
In 1849,	exported	3,373,738
In "	imported	241,935
In 1850,	exported	3 415,446
In "	imported	426,599

Exports, New-York.

In 1821,	exported	$13,162,547
In "	imported	23,629 246
In 1826,	exported	35,259,260
In "	imported	49,639,174
In 1830,	exported	19,697,983
In "	imported	35,624,070
In 1840,	exported	34,264,080
In "	imported	60,440,750
In 1849,	exported	45,963,100
In "	imported	92.567,369
In 1850,	exported	52,712,789
In "	imported	111,123,524

"Since the adoption of the constitution, when the commerce of New-York and Virginia was about equal, the exports of the latter have been nearly stationary, and the imports have fallen off to about one-sixth of what they then were, while those of New-York have increased nearly fifty times greater than they were, and the exports sixteen times. The exports of the whole Union, in 1850, amounted to $151,898,720, and the im-

ports to $178,138,318. New-York exported nearly one-third, and imported three-fifths."*

The exports for 1849, of the United States were		$132,666,955
From which, it appears, there was exported in value of cotton	66,396,967	
Tobacco	5,801,207	
Manufactured tobacco	613,044	
Rice	2,569,362	
		75,380,580
		$57,286,375

Nearly three-fifths being of Southern productions.

Exported, of these articles, in 1850:

Cotton	$71,984,616
Tobacco	9,951,023
Manufactured tobacco	648,832
Rice	2,631,557
	$85,216,028

2.—COTTON PLANTERS' CONVENTION.

This assemblage at Macon, which represented several states, was of a most respectable character, and had the time been long enough for the notice to be generally circulated, and for the public mind to be fully made up, there is no doubt it would have been one of the largest Conventions ever held in the South. We have not been fortunate enough to procure the official list of proceedings, but understand that the address and resolutions of the Florida meeting, out of which the Convention sprung, and which were published in our October number, were adopted. The Convention recommended subordinate county associations, etc., to be formed throughout the cotton states. Much good must eventuate from such organization. It has been the misfortune of the planters, that though one in interest, they have ever been divided in counsels; unlike in this respect either merchants or manufacturers; and the result is, that they are, and ever have been, at the mercy of both. Why is it, that in a time of general peace and commercial prosperity throughout the world, the value of cotton falls in a few months nearly one-half, and this when the increase of the crop is not more than one-tenth? Doubtless the rates and principles of political economy are capable of a partial explanation of the reason, but they cannot demonstrate it to be necessary, or growing out of anything but an extremely arbitrary state of things. The laws of demand and supply have *not* been left free to operate upon prices. All of us see fully this, but who is wise enough to suggest the remedy? Will the plan of the Macon Convention effect it? There are thousands who doubt. Will Mr. Baylor's project of *direct* continental trade effect it? This is answered by an intelligent merchant, whose name we will not give, but an extract from whose letter is below, in the negative. The subject is still open for discussion, and we trust that the planters, who are in general an intelligent class of men, and the press which is supported by them, will keep it constantly before their eyes. We ourselves shall not be idle, and extend our pages to all who may wish to occupy them in the matter.

"Had so many who are speculating upon the cotton trade and its supposed diseases, looked deeply into the influences of that power (steam) as displayed on the ocean, and on rail-roads, and on trade, their problem might have been better solved, than in locating the disease exclusively in monopoly and want of distribution, by a more direct trade with the consuming markets. New-York and Liverpool merchants have only studied deeper the elements favored by steam, of monopoly in trade, and by steady perseverance have accomplished, what it will be found more difficult to dissolve than Mr. Baylor imagines. Ardent and enthusiastic, he has awakened attention to the subject; and your Convention (*i. e.* in January next,) may probe with more effect, the disease he would remove, and by the intervention of cotton planters. But he will find that all appeals to that interest will be unavailing, unless the subject be taken hold of by the commercial capital and the commercial marine of the ancient cities of Amsterdam and Bremen. When these cities take the initiatory and open the avenues to trade, by furnishing the facilities and the means of certain and rapid intercourse, the planters will find it to their interests to respond. But for them to combine and ship can never be effected, and their shipments would be unavailing beyond the first experiment. The speed and certainty of intercourse between remote countries is the most important element of trade; and first the packet system, and now steamers to sail on a given day, be there freight or not, has done more to build up those bloated emporiums of commerce than any other operation which may have come in aid. We see the effects of this system daily: and when other cities and countries do likewise, and open the high-ways and the by-ways to intercourse and com-

* The reader will find many valuable tables of the exports and imports of the South, as compared with the North, in the eleven volumes we have published. He will also consult with advantage the reports of the Mercantile Conventions of Charleston, and of Macon, contained in our volumes for 1847 and 1848.

merce, distribution will follow, and the monopoly, which superior advantages controlled, will give way to competition and equalization; each commodity or element of exchange finding the cheapest and most direct channel to the marts of consumption."

3.—MACON INDUSTRIAL FAIR.

The late exhibition at Macon, is represented to have been of unusual attraction and splendor. Ten thousand strangers were attracted to the spot from all parts of Georgia, Alabama, Florida, part of Mississippi, etc. The success of these fairs are one of the strongest evidences of the progress which characterizes Georgia in almost every department of industry or enterprise. They should be countenanced and extended throughout all the South.

Beautiful specimens of embroidery, fancy-work, paintings, etc., were exhibited by the ladies, who excelled themselves in these displays of taste. Choice flowers, native and exotic, in graceful boquets, crowned every table.

In the machinery department, a forty horse steam-engine is noticed, from the establishment of Gindrat & Co., of Montgomery, Alabama, in the very highest terms, as a fine specimen of skill, taste, and ingenious construction.

In the manufacturers department, a double set of harness from Albert Hatch, took the premium, as also did a barouche and buggy from James Hulbert's factory, at Macon. Manufactures of wool and leather were not extensive. Many woolen and cotton factories were represented, as also were paper and flour mills, etc.

It would be impossible, however, to enumerate a tithe of the articles exhibited, and we shall but briefly run over a few; varieties of cotton, wheat, corn, potatoes, turnips, squashes, cabbages, apples, oranges, pomegranates, native wines, horses, mules, etc. The cattle and poultry show we extract from an exchange.

"The cattle show was limited, but so far as it went, consisted of very fine animals and of choice breeds. Mr. R. Peters and Mr. J. V. Jones, of Atlanta, were competitors. A few others, whose names are not recollected, two or three of them resided at Macon, were also competitors. Col. Joseph Bond took the first premium for the best cow. She yielded sixteen quarts at one milking, in presence of the committee.

Mr. Peters and Mr. J. V. Jones took more premiums than any others. They were almost the only competitors for premiums for hogs and sheep. Of the latter, Mr. Peters exhibited a three year old South Down, which weighed 293 pounds, and sheared 14 pounds.

The most attractive feature of the exhibition was the display of rare birds and poultry.

The principal contributors to this department were Mrs. Charles Collins, of Macon, Mrs. J. V. Jones, of Atlanta, Doct. Geo. M. Battey, of Rome, and Mr. D. Redmond, Mr. R. Peters, and Mr. J. V. Jones, of Atlanta. There were between forty and fifty varieties of fowls. They were from every portion of the globe—from Europe, Asia, Africa, and North and South America. They were of every variety of form, of color, of shade, and size known to poulterers, from the little silky bantam, scarcely as large as a partridge, to the Hong Kong, the Malay, the Burampooter and the Imperial Shanghai, some of which exceeded the size of ordinary turkeys.

The collection was quite extensive of game fowls, whose rich plumage, gallant bearing, and fearless eyes, gave to them a peculiar attractiveness. There was one splendid black hen of oriental stock, of long slender neck, sharp bill, and vulture-like eye and head, which was labelled as having cost *one hundred and twenty dollars on account of her fighting qualities*, and who would be matched to whip any hen in the United States, *for twenty thousand dollars*.

Wild and domesticated wild turkeys, several varieties of geese, among them the large and beautifully white Bremen. A pair from the East of yellowish or dun color, whose united weight was probably not less than sixty pounds.

"Ducks of every hue and from every clime—this list will give the reader some idea of this display of the feathered tribe. Doct. Battey's collection of pigeons, twelve distinct varieties, and most of them very beautiful, was not the least attractive part of the exhibition. Nor should be omitted the beautiful pair of California partridges, of a size somewhat larger than the quail, with their distinctly defined plumage of rich brown and pure white, each plumed with two erect feathers upon their delicate-shaped heads. They attracted much attention, and were universally admired."

4.—LIFE AND TIMES OF LAFITTE.

The paper which was published in the October number of our Review with this caption, was animadverted upon by one of the city presses, the Delta, with a great deal of harsh criticism, so far as the author of it was concerned, and so far as we ourselves were interested, with a great deal of injustice. This was so evident to many as to induce the belief that some motives of

personal ill feeling were mixed up with the criticism, though considering our previous relationship with that Journal, it is difficult to say how such feelings could have been provoked. But be that as it may, we never endorsed the paper on *Lafitte* as genuine and authentic history, in every particular, but simply gave it with the author's own authorities, (and he is a very respectable gentleman,) as we give a great many other papers, and as every other editor necessarily gives them. Even had the piece been a pure romance, it would have been admissible under the head in which it was placed, that of *General Literature*, where many months ago we announced a determination to include "sketches of fact and fancy" for the purpose of enlivening the pages of the Review. Our readers know that we have inserted several such sketches, without the possibility of their being deceived; and if there were errors in the paper upon Lafitte, which we think not improbable, the authorities relied upon are not of such a character as to furnish a guarantee against them.

The first point at issue is—was Lafitte a pirate, a sailor, a captain, in early life, under Napoleon, or was he, as it is alleged, a blacksmith of New-Orleans, and a very common-place mercantile adventurer? Having given the views of our author, we insert those of his critic.

"Jean Lafitte, who commanded the band of men who were broken up at Barataria, in 1814, by Commodore Patterson,—who was tried in the United States court in this city for a violation of our neutrality law, and for smuggling, (never for piracy)—was no other than the aforesaid blacksmith from Marseilles, whose identical shop stood on St. Philip-street, until it was pulled down, a short time ago. And for the truth of this statement, we rely upon the testimony of Colonel John R. Grymes, of this city, who has been for the last forty years one of our most prominent citizens; and who was the counsel and attorney of Jean Lafitte, in the prosecutions by the United States. Also Mr. Kilty Smith, a venerable citizen, who held the office of Naval Officer in this city during the invasion of 1814, about the time of Lafitte's transactions here. We read the extract in De Bow's Review to these gentlemen, and they both concurred in the facts stated in our criticism. It was from them, as well as from others of our old residents, we derived the information that Lafitte was a blacksmith."

The second point is—Did Lafitte serve in person at the battle of New-Orleans? Our author's assertion, that he did, is denied generally, upon the authority of our estimable citizen, Maunsel White, and specifically upon the following declaration of H. W. Palfrey, Esq., another of the veterans of 1815: "I did not see Lafitte, or hear of his being at the American lines; I am confident that he was not entrusted with any important command in General Jackson's army." These gentlemen had the means of being correctly informed, though we learn there is a cotemporary authority in Niles' Register, that Lafitte was actually at the battle. We shall hunt it up and notice it hereafter.

The third point is—Did the author give a correct account of the battle of New-Orleans? Mr. Palfrey says, "There was nothing connected with it that could properly be called a *glacis*. I saw no cavalry in the British army, and only five or six horses. If there had been more, I think I should have seen them." Let the author justify himself on these particulars.

"The description of this battle I took from the manuscript of an eye-witness, who asserts that there was a "glacis," and whose assertion is equally as good as your own. This writer also says, that the ladders and fascines were *not* brought up; and, in a word, every particular relating to this battle (with the exception of the cavalry and Lafitte's actions upon that occasion,) are taken from the manuscript of this eye-witness. I may be in error as to the number of horse, but you are equally so in the other extreme, when you allege there were "not over a dozen horses in the whole army." You are also in error when you say I convey the idea that Kean was killed. This construction could not be put upon the sentence, taken in connection with the previous events of the battle. "Kean fell at the head of his troops." —"Burning to revenge the death of their *commanders*," (not command, as you quote,) "the Highlanders rushed forward with inextinguishable fury."

Nothing is calculated to give a more correct notion of the difficulties that environ history, and which made Sir Walter Raleigh despond in the preparation of his, than all of this incertitude and discussion about a matter which happened in our very midst, and within the memories of hundreds of our citizens. Let any man read the different versions of the battle of New-Orleans in the histories, and he will be convinced of this. It is sufficient to say, that many of the most important points remain unsettled, and that

no one can rise from a study of the subject without conviction that public opinion has been for a long time in the wrong upon them. We believe that Latour is the most reliable, though he is corrected by some of the "eye-witnesses." Why does not Mr. Gayarre, who is our native historian, take up this matter and sift it thoroughly? He would win great laurels in this field. Meanwhile we intend ourselves a closer study of the subject, and shall, before long, present a paper upon it, being aided by a very interesting manuscript contemporary record, kept by an officer in the field, and embracing a period of several weeks before and after the battle.

5.—SOUTH CAROLINA INSTITUTE FAIR.

The late exhibition of this institution in Charleston was very imposing, and contrary to anticipation was more brilliant than ever. Immense crowds were in constant attendance. There were upwards of four hundred articles on the catalogue—more of them being of a useful character than ever.

Among the premiums awarded were—

Gindrat & Co., Alabama, for best steam engine, and also for several other articles of iron; William Lebby, best portable steam engine; Archer & Co., Virginia, various iron work, hatchets, axes, etc.; N. H. Lebby, Charleston, gold medal, for best machine for flowing and draining lands—(we already referred to this machine in our pages, but did not then know that it was the work of our old school-mate and friend, whose ingenuity, even in early boyhood, was the constant marvel of his gaping companions, and who must have gone very high in the mechanical world had his application been equal to his genius)—D. McComb, Memphis, for best Labor-Saving Cotton Press; Patton, Donnegan & Co., Huntsville, best cottonades, ginghams, etc.; Charleston Mills, cotton shirtings; R. Hawley, Columbia, silk hats, the first manufactured in the state; Dr. R. Harlee, wine from Scuppernong grapes; B. B. Sams, Beaufort, wine from wild orange; W. H. Coin, Augusta, friction matches; Carew & Hopkins, shoe factory, best plantation brogans; Atlantic Steam Mills, second best flour; T. & J. Bookman, Richland, best flour; James Gamble, Florida, leaf tobacco; Robert Chisolm, bottles olives, good as the French; Rock Island Factory, Georgia, post office paper; V. McBee, South Carolina, best newspaper; a young lady of Charleston, two cameos cut from ordinary conch, gold medal; Mrs. O. Leslie and daughters, worked chair; Mrs. Loury, socks knitted from the fur of wild cat; South Carolina Stained Glass Works, best specimen; Mrs. Samuel Reed, South Carolina, spun silk in its natural state, gold medal; Reuben Wallace, South Carolina, barrel rosin and barrel turpentine; A. H. Rhoads, New-Orleans, ornamental iron work; Hamlin & Tew, Christ Church, woollen blankets, also for brooms; Ed. Whaley, Edisto, Sea Island cotton; Gen. Jessup, Georgia, silk cotton; J. R. Jones, Georgia, best upland cotton; C. Rhodes, South Carolina, earthen ware; L. M. Hatch, Georgia, Burr stones. The committee hold in consideration Parkhurst's Cotton Gin for uplands, and Shaffer's Sea Island Gin.

We have named but a few of the articles to which premiums were awarded. A great many were given to the ladies for beautiful fancy work, and many were also given to the various artisans and mechanics who were represented in the fair.

The poultry exhibition is also noticed in high terms, but we can do nothing more than refer to it, intending in our next, through the pen of a friend, to give the Institution a fair showing.

Game Fowls.—From C. M. McMichael and D. Jewel, Orangeburg, S. C., A. G. Summer, Lexington, Dr. J. K. Furman, A. C. Phin, John C. Miller, C. Dukes, Charleston.

Asiatic varieties.—Cochin China, Shanghaes, Imperial Chinese, Brahma Pootras—Hugh Wilson, Wadmalaw. Gray Chittagongs, Alpine Eagle Fowls, Cochin China, Shanghaes—Drs. Furman and Couturier. Cochin China and Shanghaes—John Michel, Dr. A. P. Hayne, Charleston. Shanghaes—Dr. D. Gieger, R. A. Pringle, do. Bucks County Chittagongs—C. H. Stevens, do. Imperial Chinese and Shanghaes—T. A. Whitney, do. Chittagongs and Shanghaes—A. C. Phin, H. C. Gefkin, do. Malays, Black Java and Cochin China—Edward Horry, do.

Top-Knot Fowls.—Black and Frizzled Poland—C. Volmer, Charleston Neck. Gold Spangled Hamburgs—Dr. E. Horlbeck, Charleston Neck.

Bantams.—Silver Sebright and Partridge Bantams—T. B. Lucas, Charleston Neck. African Bantams—A. G. Summer, Lexington.

Pheasants.—Gold and Silver Pheasants —T. B. Lucas, Charleston.

These picturesque-looking birds are a rare curiosity, and of themselves well worth a walk around the Exhibition room. We noticed a pair of mammoth Geese from the Dairy Farm of Dr. W. G. Ramsay, on the Neck, and a beautiful pair of Summer Ducks, from Dr. Phin's farm in the same neighborhood. The Exhibition continues to be well attended, and will be open during the remainder of the week, morning and evening.

6.—R. C. BRINKLEY, OF MEMPHIS.

When we published, in our September number, the biography and portrait of Mr. Brinkley, believing that he was a fair specimen of the enterprise and spirit of Memphis, it was thought by some that he was too young to occupy so prominent a place in our gallery, though we have reason to know since that the public opinion of Memphis entirely justifies the selection which was made by us, without consultation with any person whatever. A correspondent of the Nashville Banner thus speaks of the merits of Mr. Brinkley, and we only quote the passage now as our original biography was very meagre. We hope to make other selections from Memphis:

"Memphis can boast of a single citizen who in the past eighteen months has aided public enterprises more liberally, in proportion to his wealth, than perhaps any individual in the South. He has subscribed one thousand dollars to the Memphis and Hernando Plank Road; one thousand to the Sommerville Plank Road; five thousand to the Germantown Plank Road; ten thousand dollars to the Memphis Manufacturing Company; and fifteen thousand dollars to the Memphis and Charleston Rail-road. He gave his land to the Rail-road for a depot at $300 per acre, for which he had been offered $500. He has aided liberally in the construction of every church which has been erected in Memphis for the past eight or ten years. He has given a lot to a minister, for which he was receiving annually from four to five hundred dollars, "to have and hold" as long as he would keep up a school on the premises. He has just built the finest block of four story brick and stone business houses in the west. He is now devoting his whole time and energies to the Memphis and Charleston Rail-road without charge. His private acts of charity and beneficence are worthy of his public conduct."

7.—AFFLECK COTTON PLANTATION RECORD,

Consists of a folio blank book, of good paper, well bound, ruled and headed complete. The heads are for an inventory of stock, for daily and weekly records of events, etc., and for showing names of hands, with their work, etc., different articles furnished to each hand; records of births, deaths, sickness, weights of cotton bales, products of plantation and expenses, balance sheet, &c. This valuable book is coming into extensive use among the planters.

A few copies have been deposited at the office of this Review, which may be had by letter, enclosing $2: or $2 50, when the postage of the book will be *prepaid*. These are of the *medium* size, or for forty hands.

8.—LOUISIANA MINERAL SPECIMENS.

We noticed, several months ago, an interesting cabinet of mineral specimens, picked up in Louisiana, and polished by a very worthy and old citizen, Dr. Holliday, of Harrisonburg, Louisiana, who is now in want of money, and will dispose of them on very accommodating terms. The specimens he has left in our hands for safe keeping. Will not some gentleman of wealth, curious in these matters, reward the laudable spirit of Dr. Holliday? There are near two thousand specimens.

9.—BOOKS OF THE MONTH, FROM J. C. MORGAN—J. B. STEEL, ETC.

1. *Fall of Poland*: Containing an analytical and philosophical account of the causes which conspired in the ruin of that nation; together with a history of the country from its origin. By L. C. Saxton, in 2 vols. Charles Scribner, New-York.

This Mr. Saxton, whoever he is, and he appears to live somewhere in the interior of New-York, has certainly prepared a ponderous book. After hurrying over the chronology and geology of the country, he throws the rest of his material into chapters upon "Sovereignty," "Progression," "Army," "Wars," "Aristocracy," "Democracy," "Slavery," "Laws," "Literature," "Civilization," "Conquest," etc. He has a chapter upon the "Corporation views of Poland and other nations," and another entitled "An Argument for the Restoration of Poland." The facts are drawn from all reliable works upon Poland, including histories, geographies, encyclopædias, periodicals, reviews, travels, &c. The work is, of course, a mere

compilation, and when the author tells us, "I have generally avoided the use of *recondite* materials, although *occasional drafts on oriental literature* could not be avoided," or "In relation to the principles of philosophy, of government, law, religion, society, wealth, and other elementary conclusions, which have been familiar (to me) for many years, I have not referred to the books, for the reason that it would be impossible at this late day to distinguish between those authors to whom I might have been originally indebted in early life, and those conclusions which should be charged to the more mature reflections of riper years,' etc., etc., we perceive his insufferable vanity and conceit, and begin to suspect the extent of the *profoundness* which so much vaunts in advance.

The bitter prejudices and ignorance displayed by the author, in his chapter upon slavery, to go no further, *fix* upon the mind the impression which is provoked by his preface. It is time that the South should put its brand upon the authors of such sentiments as these, by refusing to purchase their books. The fault is not with the publishers, but with ourselves.

"Slavery, in its numerous degraded forms, furnishes every variety of unworthy objects for the gratification of the master's base passions, without resistance or redress, and cultivates in his bosom prodigality, pride, anger, cruelty, selfishness, and licentiousness; producing disease and premature death."

Oh, sapient Mr. Saxton, how long have *your* countrymen tested the "selfishness" of the planters and gentlemen of the South, in their annual migrations hither? Let the often-outraged hospitality of our people speak!

Again, "No nation has ever survived slavery, where the experiment has been tried long enough to develop its fatal consequences, without abolishing it. National prosperity and slavery cannot stand together. The institution is inconsistent with the physical, intellectual, and moral constitution of man, and cannot long exist with civilization, literature, morals, and religion." Perhaps this wiseacre has never heard that the republics of antiquity rose to renown and splendor whilst their slave institutions were in full vigor, and that their decadence, so far from preceding, followed always upon the heels of the abolition of these institutions. Perhaps, too, he regards *his* narrow and bigoted intellect fit to be compared with that which marks and characterizes the *benighted* civilization of the South! Some of our schoolboys would give him a lesson upon subjects upon which he prates so complacently.

Finally, hear this sapient Saxton speak of an institution upon which is founded, at the present moment, all of the wealth, power, civilization, and safety, of fifteen states of this confederacy. "America, now only in the sixtieth year of her national existence, has abolished the slave trade, *and demolished the institution, with a few lingering, modified exceptions*, which are doomed to die at no distant day. Irrespective of all moral considerations, it is a question well worthy the serious consideration of statesmen, whether slavery *has not become a superannuated institution*, unworthy and useless in the middle of the nineteenth century."

2. *Epoch of Creation*—The Scripture Doctrine contrasted with Geological Theory. By Eleazar Lord; with an Introduction by Richard W. Dickinson, D. D. New-York: Charles Scribner, 145 Nassau-st.

This work has its origin in the sceptical tendency of certain works on the subject of geology, and in the fact that many friends of the Bible have been making concessions to geology, believed to be fatal to the drift and integrity of the Mosaic record. "What do the scriptures teach respecting the work of creation?"—is the one great question considered in this treatise. "If geologists may draw different conclusions from the changes in the organic and the inorganic world, which are now in progress, by what law of evidence are we bound either to harmonize the Mosaic record with their conflicting theories, or to discard its authority."

3. *The Young Emigrants.* New-York: Charles Scribner.

A neat little volume, containing several interesting stories for children, to wit, Madelaine Tube, The Boy and the Book, The Crystal Palace, &c.

4. *The Young Christian.* By Jacob Abbott, greatly improved and enlarged. With numerous engravings. Harper & Brothers.

Mr. Abbott, who has been writing an interesting series of histories and biographies for the young, has now undertaken a series

of Christian works, intended to guide the youthful footstep in the way of heavenly life. The series will embrace "The Young Christian," or a familiar illustration of the principles of Christian duty. "The Corner Stone," or a familiar illustration of the principles of Christian truth. "The Way to do Good," or the Christian character mature. The style and execution of the work are very handsome.

5. *Braggadocio.* A book for boys and girls. By Mr. L. C. Tuthill. Charles Scribner, New-York.

Another little story for children, with "pictures" illustrating the proverb, "Brag is a good dog, but Hold-fast is better."

6. *Naval Life;* or Observations Afloat and Ashore. By W. F. Lynch, U. S. Navy. Charles Scribner, New-York.

The author is evidently an unpracticed writer, and has yet much to learn in that field. His object is to portray the trials of naval life, and combat the rising prejudices against it. He entitles his book "The Midshipman," and dedicates it to Lieut. M. F. Maury. We give a specimen of his style in describing a night scene:

"At night, the sea became beautifully phosphorescent, and the waves, as dashed aside by the advancing prow, fell over in curls of flame. Here and there a luminous track betrayed the course of the flying dolphin to the rapacious shark, whose impetuous rush left a broad and sparkling wake, which was lost in one bright whirl, as the destroyer closed upon his victim. Once there was a rushing sound, as a whale, disturbed in his slumbers, floundered for an instant, and then through an illuminated path plunged deep into the recesses of his native element; while myriads of porpoises, the dolphins of antiquity, sportively chased each other, and, darting to and fro, without design or order, chequered, with lines of light, the dark, unruffled sea."

PERIODICALS, ETC. OF THE MONTH.

1.—*Captains of the Old World,* as compared with the Great Modern Strategists—their Campaigns, Characters and Conduct, from the Persian to the Punic Wars. By Henry William Herbert. New-York: Charles Scribner. New-Orleans: John Ball. 1851.

This work is issued in superb style, with numerous illustrations. Among others, The Roman Knight's Charge of the Roman Legion; March of a Grecian Army; Onset of Numidian Horse. The introductory chapter treats of ancient warfare in general, and the tactics then in use. Then follows the career of Miltiades, son of Cimon. Themistocles; Pausanias, the Spartan; Xenophon, the Athenian; Epaminondas, the Theban; Alexander, of Macedon; Hannibal, in which last case the author finds a striking parallel with Napoleon, though, on the whole, he inclines to the opinion that Hannibal was the greatest strategist of the two. The author proposes a series of similar volumes upon the Captains of Rome; Captains of the Eastern Empire; Captains of Barbarians; Captains of the Middle Ages; and the Statesmen and Orators of each of these periods in succession; together with the Hero-Kings and Tyrants of Greece. This is a wide field, and well adapted to the peculiar talents of Mr. Herbert.

2.—*Rural Homes;* or Sketches of Houses Suited to the American Country Life, with original Plans, Designs, &c. By Gervase Wheeler. New-York: Charles Scribner. New-Orleans: John Ball.

Let every planter desirous of improving or beautifying his estate, procure a copy of this interesting work, which commences with the first foot-tread upon the spot chosen for the house; details the considerations that should weigh in selecting the site; gives models of buildings differing in character, extent and cost, and suited to particular localites and to circumstances; shows how to harmonize the building with the surrounding scenery, and to economise expenditure with truest refinement of taste; teaches how healthfully to warm and to ventilate; assists in selecting furniture, and the numerous articles of utility used in constructing and finishing; with remarks upon the adjuncts to the house; concluding with practical directions to building amateurs, &c.

3.—*Claims of Science:* An Address delivered before the Societies of Erskine College, S. C. By Wm. C. Richards, A. M. 1851.

The author ranges over the whole field of the sciences, and throws around their domain much of the poetry of his own cultivated imagination. Mr. Richards has long been known for his literary spirit and services in behalf of the commonwealth of Southern letters, and his address at Erskine College

is one of the happiest of all his productions.

4.—*Some of the Thermal Waters of Asia Minor.* By Dr. Lawrence Smith, of the University of Louisiana, New-Orleans. This paper was read, we believe, before the American Scientific Association at Albany, and published in Silliman's Journal. It shows great labor and the powers of an almost exhausting chemical analysis. Few men of his age have more distinguished themselves in this department of science than Dr. Smith, who was for several years in the employment of the Turkish Government, and has been applauded by the scientific societies of Europe in no measured terms.

5.—*Key to the Genders of Nouns in French.* By Diego Morphy, of New-Orleans. This little pamphlet is calculated to be of much use to students of French, who always meet with a mountain of difficulty in the matter of genders.

6.—*The Charleston Medical Journal.* Contents; Wragg on Epidemic Dysentery; Simons on Yellow Fever in Charleston; Cain on Typhoid Fever; Cartwright on the Diseases of the Negro Race reviewed. This last paper, it seems, was rejected by the New-Orleans Medical Journal, and we think properly. The style and manner are not suited to such a discussion, nor are the writer's notions about slavery, emancipation, etc., at all to the taste of Southern men—for example: "Surely Dr. Cartwright does not mean that it was an act of humanity bestowed on the race—the negroes, when we stole them from their native land, and brought them among us to be our hewers of wood and drawers of water," etc. The writer is evidently young and inexperienced, and in entering the lists with such a man as Cartwright, evinces a high degree of self-satisfaction. However far Cartwright may strain his theories, there can be no doubt that they are founded upon a substantial basis of truth; that he has forgot more science than many of his critics ever knew; and that he is deserving of the praise of the whole country for his bold and fearless advances into the new field of negro life and diseases.

7.—*Appleton's Mechanics' Magazine.* No. 11. The spirit of the publication is preserved from month to month, nd it should be recommended to engineers everywhere.

8.—*Plough, Loom and Anvil,* for November. The leader is, we suppose, from Mr. Carey, who is known as the uncompromising advocate for protective tariff, and is headed "Frauds of the Advocates of British Monopoly."

9.—*Whig Review,* New-York. Contents: Political Responsibilities; Santa Rosa; Kossuth and his Country; Murat; Imagination and Fact; Journalism in New-York, in which the writer intimates that the profits of the New-York Tribune are $70,000 per annum; Evenings with Female Poets; Presidential Elections, &c.; Portrait of General Coombs.

10.—*Democratic Review,* New-York. Contents: Repeal of British Corn Laws; Parisian Saloons; Queen's Cup; Some Irish Poets; Reedyrill; Last of the Sacred Army; Financial and Commercial Review; Miscellanies; Biography and Portrait of General Wool.

11.—*Western Journal and Civilian.* St. Louis, monthly. In this number H. Cobb is admitted as co-editor with Mr. Tarver. Art. I. Commerce of the Mississippi Valley, a most able and valuable paper by the senior editor, who never writes anything slovenly or incomplete. Art. III., On a Southern Route to the Pacific, has an especial interest just now, and goes very far towards seuling a point we of the South have always contended for. The literary department contains a good many original papers.

11.—*Westminster Review* for October. Leonard, Scott & Co. Reprint. Contents: Western Africa; The Marlboroughs and the Reign of Queen Anne; Reason and Faith; Decisive Battles; Process and Pleading; Life and Immortality; Foreign Literature. These reprints have the advantage of cheapness, and the works themselves are the best, in their broad limits, of the English language.

13.—*International Magazine.* This beautiful and cheap monthly is rapidly progressing in interest and in circulation. The

present number contains twelve splendid illustrations of the great agricultural fair at Rochester.

14.—*Harper's Magazine.* Harper's Monthly Magazine, $3 per annum. Nothing more need be said of this than that, in less than two years, it has acquired a circulation of from 60,000 to 75,000 copies monthly.

15.—*Registration of Births, Marriages and Deaths* in Massachusetts, 1850. The condensation, arrangement, &c. of the statistics, and the deductions from them, are made by Dr. Josiah Curtis, and are very valuable for reference, and will be freely used by us hereafter.

16.—*London Labor and the London Poor.* By Henry Mahew; with daguerreotype engravings taken by Beard. Nos. 13 and 14, price 12½ cents each. Harper & Brothers. This is one of the most extraordinary works of the present century, and opens new views for the political economist and moralist.

17.—*Scourge of the Ocean;* a Story of the Atlantic. By an officer of the United States Navy. A. Hart, Philadelphia; J. B. Steel, New-Orleans.

18.—*Stone Mason of Saint Point.* By Alphonse De Lamartine. Both of these works are cheap editions, in paper bindings, the last from the house of Harper & Brothers.

19.—*Silliman's Journal, November,* 1851. $5 per annum. Contents: Zodiacal Light; Cultivation of Nutmegs and Cloves; Coral Reefs and Islands; Tidal Observations on the Coast Survey, by Prof. Bache; Silurian Basin of Middle Tennessee; Preservation of Animal Substances; Mineralogical Notices; Observations on the Pendulum Experiment; Meeting of the British Association; Botany and Zoology; Miscellaneous Bibliography, &c.

20.—*Southern Literary Messenger,* October and November, 1851, New-Orleans. This is perhaps the very best number ever issued by our contemporary, which is saying a great deal for it. Art. 1. Gov. Spotsford and the Virginia Burgesses; 2. History of Richmond; 4. James Lafitte, by Tuckerman; 7. The Ebony Line—an attempt to bolster up that odious scheme which some Southern men have suffered themselves to give countenance to, and which we denounced many months ago as further evidence of the disposition of Congress to interfere and encroach on the subject of slavery and colonization. The twelfth article, from Lieut. M. F. Maury, on the *Commercial Prospects of the South,* should be read and studied by every man on this side of the Potomac; and we intend to contribute thereto, if possible, by republishing it entire in our pages. The editor has a beautiful poem "To Bulwer, on a Second Reading of the Caxtons," which we regard a finished production.

21.—*Southern Quarterly Review,* October, 1851, Charleston.

Mr. Simms, the editor, is spoken of in some quarters as a fit person to fill the chair vacated in the South Carolina College by the resignation of Wm. C. Preston. We think he deserves it, for the high and honorable place he has won in the republic of American letters. We have never been an indiscriminating panegyrist of Mr. Simms, but have, nevertheless, barring some faults, always regarded his reputation with pride and hope. He is scarcely yet in the zenith of his career, and has, we doubt not, many other laurels to win. Art. 1, on "South Carolina," is too much on the red republican school, and too bitterly abusive of Virginia for her course on the compromise measures. These things produce but heart-burnings and recrimination. "Separate Secession," evidently from a co-operationist, perhaps Mr. McCord. In the "Athenian Orators," we recognize the pen of one whom we welcome again to our hours of study, George Frederick Holmes, one of the most distinguished scholars in America. The paper on the "Philosophy of Language" is too long and too heavy. "Women of France," "Human Races," "Education," "Popular Discourses," "Neglected Poetry," are all able and interesting.

EDITORIAL NOTES.

In our next will appear the proceedings of the *General Rail-road Convention* to be held in New-Orleans on the first Monday of the present month. We fear the assemblage will not be as large as was at one time expected. The period is too early for the

country people to come in—especially from a distance; the press, neither in New-Orleans nor out of it, has taken up the matter at all, with rare exceptions, leaving the committee, who have done their duty faithfully, almost *unsupported*. The truth is, it is impossible to rouse the southern people on any subject whatever of enterprise, and the sooner we admit it and ground our arms, the better. Nobody among us cares one fig about *to-morrow*, or would waste his resources and time upon *mere action*, when it is so easy to *talk!* With a little co-operation from the Press, this convention might have been made the most important one that ever assembled in the Southwest. As it is, we expect a very homespun sort of an affair: God grant that we may be disappointed! It is not yet altogether too late to hope.

☞ In our next, perhaps, we hope to publish an article on *Banking*, from the pen of J. S. Duke, Esq., formerly of this city, but now a merchant of St. Louis, who is in every respect qualified to make a most able disquisition upon the subject, which he has long studied, both theoretically and practically. Our friend, Mr. Duke, contributed several able papers to our pages in 1846 and 1847.

☞ Subscribers who have not noticed the bills and the circulars we have enclosed asking for remittances, will ask themselves if the carelessness is altogether fair towards us, considering our very heavy expenses, very great labors, and "exceeding small reward," even at the best. Let every one take the case to himself, and *remit by mail*.

☞ OUR PORTRAITS.—In our last number, the portrait of Mr. Bates, of Missouri, accompanied the biographical sketch of Mr. Fowler, of Arkansas, and in the present number the case is reversed. These gentlemen will be assured that it has occurred by one of those accidents which it is impossible to guard against. We shall set the matter right in our bound volumes.

At the height of the summer solstice, a planter, who signed himself "Lafourche," came down very severely upon us for alleged offences of commission and omission in our sugar statistics. We plead off from a defence until the weather could get cooler; but as now it has gone down almost to freezing, that excuse would no longer serve, though, perhaps, we should not be wrong in making the opposite one. The truth is, we have been away all the summer, and have not yet got all our statistics into trim; but "Lafourche" may rely that in our next we will be at him with several piles of figures; indeed, the paper is already on the stocks, and we wish to do it the ample justice that its importance demands.

SOUTHERN AND WESTERN RAIL-ROAD CONVENTION.

We wrote an editorial note a few days ago in rather a desponding mood, about this convention, and as the printer has it in type, will let it go, though the indications since then have become more favorable.

The Governor of Louisiana has appointed a large number of delegates from the state at large, and Gov. Collier has reciprocated by the nomination of over one hundred from Alabama. With these precedents, we yet cherish the hope that the executives of other states will respond in a similar spirit to the invitation, and that the delegations thus honorably appointed will make it a point of conscious duty to be present. City and county meetings have been held in many parts of Louisiana, Arkansas, Mississippi, Tennessee, and Texas, with the view of a like co-operation; and we have had reason, since the penning of our note above referred to, to qualify our complaints touching the inaction of the press, many leading journals having come out nobly and earnestly in aid of the convention. They deserve the lasting approval of the country.

To Country Merchants.

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Standard Literature.

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Chambers' Cyclopædia of Literature.

Macaulay's History of England and Miscellany.

Milman's Gibbon's Rome—6 vols. Cheap edition.

Hume's History of England. Cheap edition, 6 vols.

Modern British Essayist.

Burke's Complete Works—9 vols. Boston edition.

NEW PUBLICATIONS

Received from November 15th, at J. C. MORGAN's New-Orleans Literary Depot, Exchange Place, adjoining the Post-Office.

Letters from England, France and Italy. By Horace Greeley. 1 vol., 12mo.

Fernley Manor; a Novel. By Mrs. Mackenzie Daniel.

Beauties of the Court of Charles II.; a series of finely engraved portraits of distinguished Women, with descriptions. By Mrs. Jameson. 1 vol., imperial 8vo.

The Land of Bondage; its Ancient Monuments and Present Condition; being the Journal of a Tour in Egypt. By Jonathan M. Wainwright, D. D. 1 vol., 8vo.

Christmas with the Poets; a collection of Songs, Carols and Descriptive Verses relating to the Festival of Christmas. 1 vol., royal 8vo., exquisitely embellished.

Lyrics of the Heart. By Alaric A. Watts. 1 vol., 8vo.

Legends of the Flowers. By Susan Pindar. A beautiful Juvenile Book.

The Philosophy of the Mechanics of Nature. By Z. Allen. 1 vol., 8vo.

Ollendorff's New Grammar for Spaniards to learn English. 1 vol., 12mo.

Moby Dick; or the Whale. By Herman Melville, author of Typee, Omoo, &c.

Young's Night Thoughts; a new and elegant edition.

The Evening Book; or Fireside Talk. By Mrs. Kirkland. 1 vol., 8vo.

The Women of Early Christianity; a series of Portraits, with appropriate descriptions. By several American Clergymen, edited by the Rev. J. A. Spencer. 1 Vol., imperial 8vo. Elegantly bound.

The Whig Review for September, containing a Portrait and Biographical Sketch of the late S. S. Prentiss.

Cicilia Howard; a Novel. By T. S. Arthur.

The Young Christian. By Jacob Abbott. 1 vol., 12mo.

The Lives of the Queens of Scotland. By Agnes Strickland. Vol. 2.

Creasy's Decisive Battles of the World. 1 vol., 12mo.

Hungary and Kossuth; or an American Exposition of the late Hungarian Revolution. By Rev. B. F. Tefft.

Naval Life; the Midshipman. By Lieut. W. F. Lynch.

Watching Spirits. By Mrs. E. F. Ellet.

The Captains of the Old World; their Campaigns, Characters, &c. By Henry W. Herbert. 1 vol., 12mo.

Rural Homes, Sketches of Houses suited to American Country Life. By George Wheeler. 1 vol., 12mo., with 60 illustrations.

The Fall of Poland. By L. C. Saxton. 2 vols., 12mo.

Harper's Magazine for Decem. and Jan.

Eclectic do do

International do do

Knickerbocker do do

Merchants' do do

Blackwood's do do

Graham's do po

Sartain's do do

Godey's Lady's Book do

Appleton's Mechanics' Magazine for December and January.

London Art Journal for Nov. and Dec.

London Lancet do

V. K. Stevenson

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